

*Fluor-O-Master*  
TRADE MARK REG.  
**BOMBER LINE**

★ ★ ★ **FLUORESCENT LIGHTING** ★ ★ ★  
**FOR WAR INDUSTRIES**



**ELECTRO MANUFACTURING COMPANY**  
2000 WEST FULTON STREET • CHICAGO



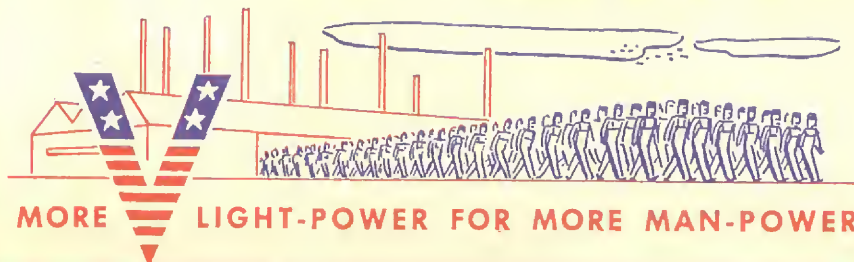
# Fluor-O-Master

TRADE MARK REG.

## "BOMBERS" LIGHT THESE DISTINGUISHED WAR INDUSTRIES

FORD BOMBER PLANT  
TIMKEN AXLE COMPANY  
BOEING AIRCRAFT CORP.  
HUDSON MOTOR COMPANY  
PHILCO RADIO CORP.  
WESTERN ELECTRIC CO.  
EDISON HOTPOINT  
U. S. ARMY AIR CORPS  
FEDERAL SHIP BLDG. CO.  
GENERAL MOTORS CORP.  
GULF SHIP BLDG. CO.  
U. S. NAVY AIR CORPS  
NATIONAL LOCK COMPANY  
U. S. ARMY ENGINEERS  
U. S. ARMY SIGNAL CORPS  
GREAT LAKES NAVAL  
TRAINING STATION  
GLENVIEW NAVAL  
TRAINING STATION

MIEHLE PRESS COMPANY  
McGRAW ELECTRIC CO.  
NASH KELVINATOR CORP.  
NAVAL DIESEL SUPPLY  
DEPOT  
UNITED STATES MOTORS  
CORP.  
U. S. ARMY QUARTERMASTER  
BOHN ALUMINUM CORP.  
DOUGLAS AIRCRAFT CORP.  
AUSTIN COMPANY  
LIBERTY TOOL & GAUGE CO.  
CHICAGO SCREW COMPANY  
CURTISS-WRIGHT CO.  
CHRYSLER CORP.  
HUDSON NAVAL ARSENAL  
U. S. RUBBER CO.  
NORTH AMERICAN  
AVIATION CO.  
CADILLAC MOTOR CO.



**MORE LIGHT-POWER FOR MORE MAN-POWER**



# FORD BOMBER PLANT

ILLUMINATED THROUGHOUT WITH

## *Fluor-O-Master*

**BOMBERS**  
WORLD'S LARGEST FLUORESCENT INSTALLATION



Albert Kahn, Associated Architects  
and Engineers, Detroit, Michigan

THERE ARE ENOUGH FLUOR-O-MASTERS IN THIS TITANIC FACTORY TO ILLUMINATE THE PANAMA CANAL ALONG ITS ENTIRE LENGTH WITH A CONTINUOUS LINE OF LIGHTS BUTTING END TO END—WITH ENOUGH FIXTURES LEFT OVER TO BRIDGE THE ENGLISH CHANNEL

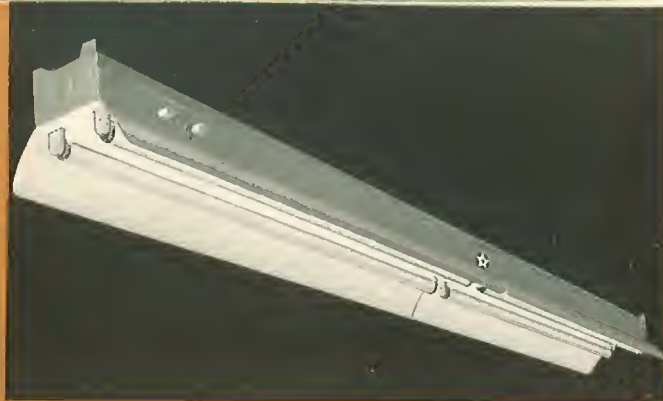




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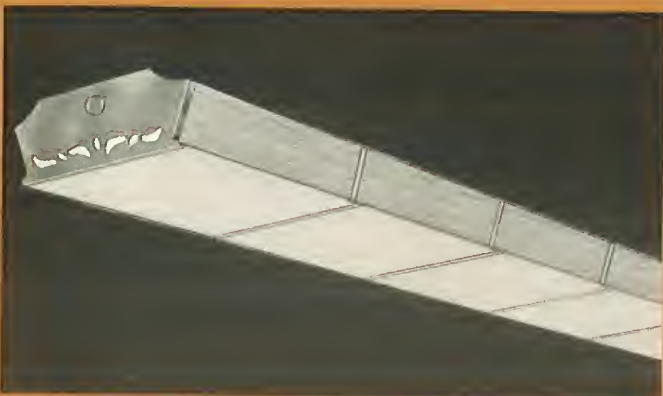
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CHANNEL FACTORY LIGHTING



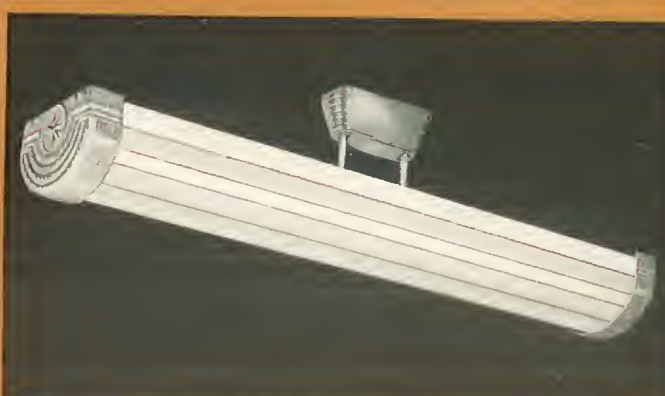
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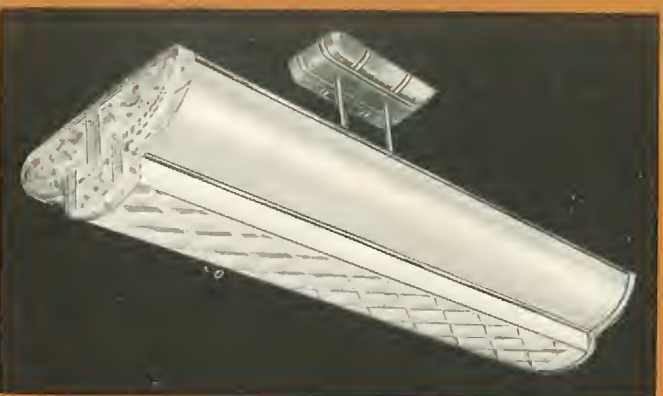
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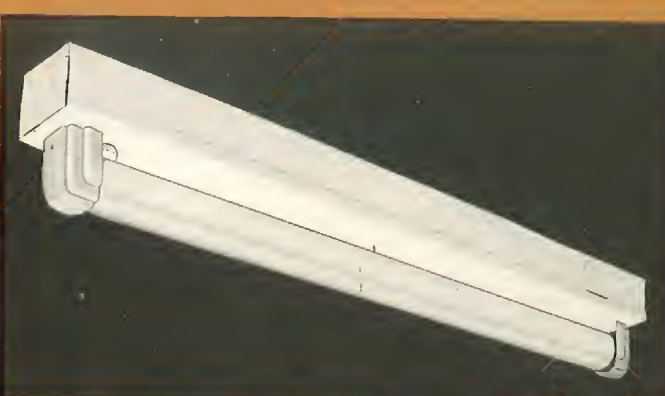
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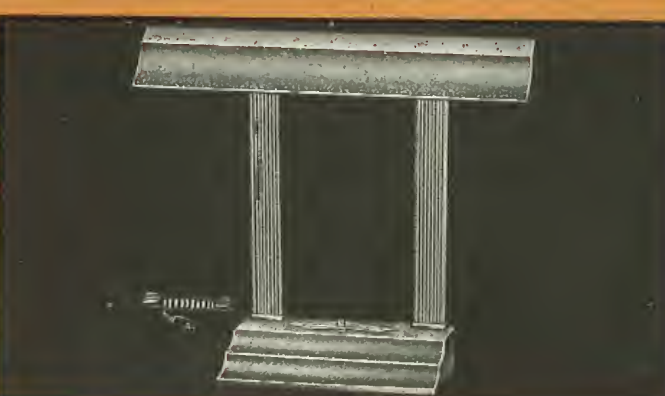
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FLUOR-O-MASTER DESK LAMP FOR  
OFFICE ILLUMINATION

**IF IT'S FLUOR-O-MASTER, IT'S THE BEST**



# f o r w a r d

## ROAD WITHOUT *End*

**T**O HOLD A PLACE as a leader, any manufacturer must be continuously dissatisfied with his product—no matter how satisfactory it may be to his customers. He must never cease trying to improve it. He must engage in endless research, constantly struggling for new means to give customers more for their money. If he sleeps at this task for even a moment, no matter how good his wares are, competitors will pass by him. That is why the light so often burns late in our research laboratory. Our endeavors to discover new improvements are the life work of trained technicians. Never, since the day this business was founded, have we paused on our journey down the long road which has no end—the road to perfection. For this progressive spirit, the trade has rewarded us generously with confidence, with patronage, with respect. These are our most precious assets, and since we can insure them only by maintaining our standards, we have built into Fluor-O-Master quality beyond compare.

# non-metal material

Electro engineers present a new type of non-metallic reflector as specified by the U. S. BUREAU OF STANDARDS. No mere metal substitute this—but a decided *improvement*. Its lighter weight reduces sag in messenger cable, cuts shipping costs. Absolute satisfaction is guaranteed wherever metal would also serve. The material has enormous strength, will not bend, dent, chip or crack—except under circumstances which would damage metal. The contours are perfect. Since this reflector is surfaced inside and out with Electro's exclusive Liquid Plastic, it has a reflection factor which cannot be surpassed. Developed after months of research to solve metal shortages, this *better* reflector proves once again that

**NECESSITY IS THE MOTHER OF**

*Improvement!*

# Liquid plastic

(REG. U. S. PAT. OFFICE)



Another spectacular triumph of Electro research is "Liquid Plastic", a chassis and reflector coating applied in liquid form, and fused by heat to the surfaces of the fixture.

Fluor-O-Master's white "Liquid Plastic" reflector surface has all the advantages of porcelain, as well as some *not* obtainable in any other surfacing. "Liquid Plastic", unlike porcelain enamel or vitreous, is guaranteed forever against chipping, crazing, or cracking. Even when metal covered with "Liquid Plastic" is BENT, this astonishing coating does not crack, but instead *stretches* with the surface.

Moreover, Electro's exclusive white "Liquid Plastic" provides the highest obtainable reflection factor (85% or more guaranteed)—with less glare than reflectors of any other type.

Battleship gray "Liquid Plastic", used on the outer surfaces of Fluor-O-Master, is the most durable, scratch proof protection that could be provided. It provides absolute insurance against rust and corrosion.



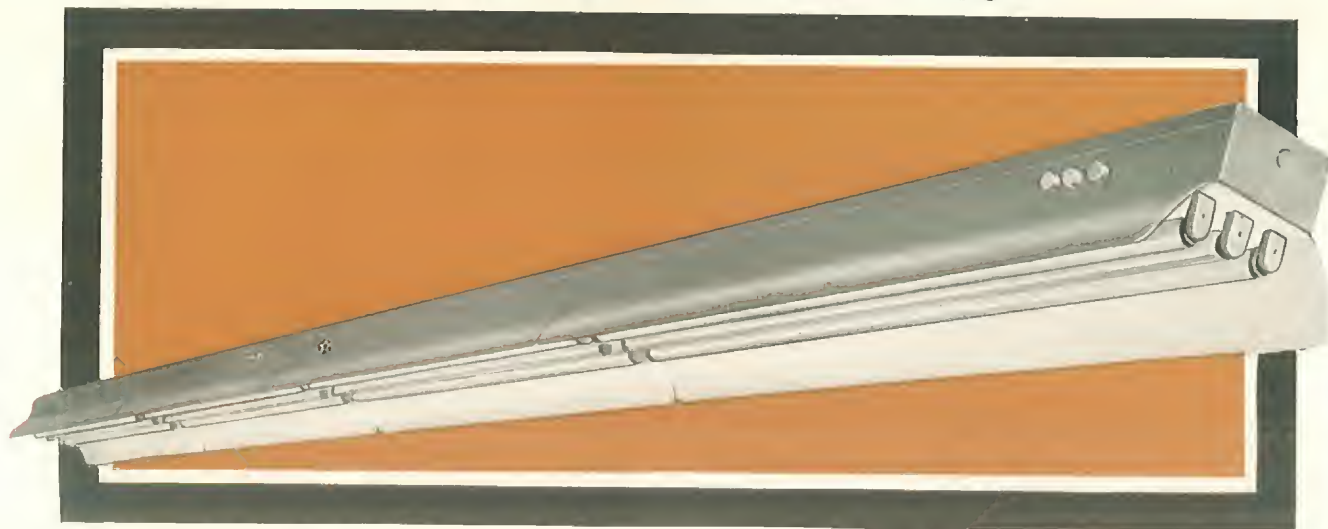
Electro's streamlined production finishing department.



# Fluor-O-Master

(REG. U. S. PAT. OFFICE)

## BRITE-ROW CONTINUOUS LIGHTING



This is the ideal fixture wherever continuous lines of light are needed over an entire plant. Provides high level illumination, 50 to 100 foot candles on the working area. Conserves outlets, installation costs, and "critical" materials.

The wiring for a Brite-row series of any length is contained inside one continuous channel, from which all reflectors suspend end to end. **THIS ELIMINATES EXPENSE** of connecting units individually with current lines, saves conduits, outlet boxes, and fittings as well as labor—which in large plants may run into thousands of dollars.

Reflectors are of amazing new *non-metallic* material, guaranteed to perform as satisfactorily as metal. Meets U. S. BUREAU OF STANDARDS specifications.

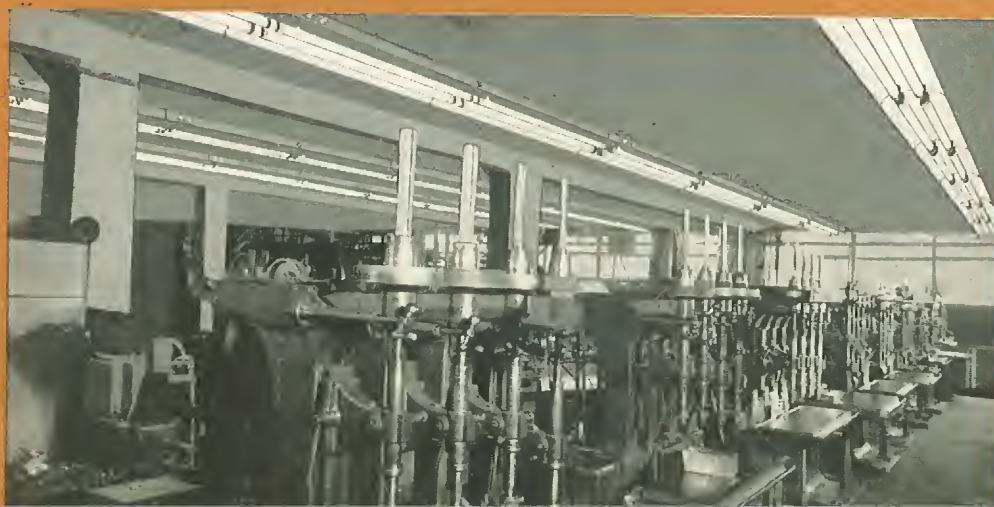
The exclusive Fluor-O-Master "Liquid Plastic" covering, applied to reflector surface, provides highest obtainable reflectivity with minimum glare. It will not crack, craze or discolor. "Liquid Plastic" is also used on the exterior of the fixture because it is the most nearly scratch-proof protective covering thus far devised.

Because of the scientific shape of the Brite-row reflector, and because of the high reflectivity of "Liquid Plastic" (far higher than vitreous), this fixture has a reflection factor of over 85%.

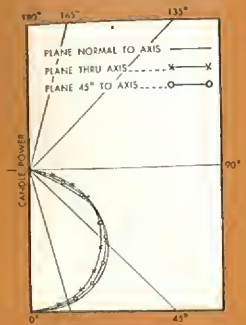
Wiring in all Brite-row units is instantly accessible for servicing—Just release two nuts, and reflector immediately drops off, exposing all wiring. Knockouts are provided for every conceivable requirement on top and side of channel, and in the end cap. Starters for 40 watt units are at side of the channel, where they may be replaced quickly. 100 watt starters are conveniently located in reflector between sockets, and may easily be removed without disturbing tubes.

Standard units can be chain suspended, flush mounted to ceiling, or hung on conduit. For other methods see page 10-11.

All units carry Electro's triple guarantee—the U.L. inspection label, the Fleur-o-lier guarantee, and the Fluor-O-Master warranty. Light the way to Victory by installing Brite-row. Watch it step up production, eliminate employee fatigue, cut down accidents and errors.





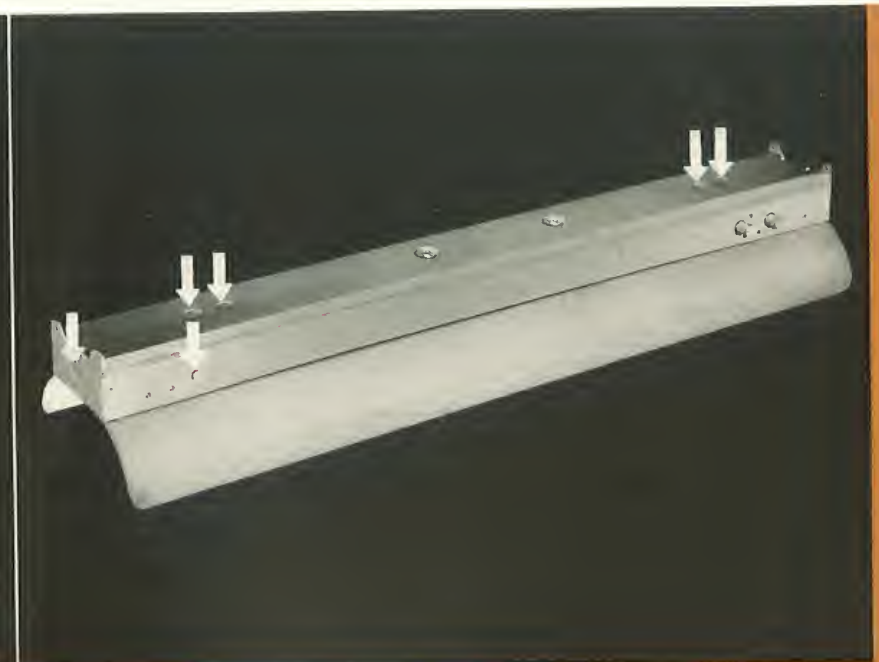
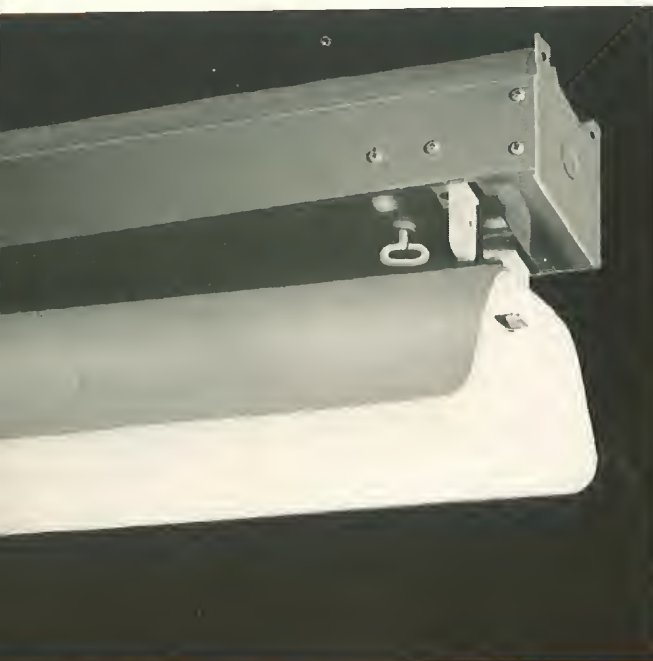


# **Fluor-O-Master** **MODEL B101** **BRITE-ROW**

A powerful and versatile unit. Fluor-O-Master Brite-row takes two T-12 forty-watt fluorescent tubes. This fixture is used to finish off the end of a continuous line or as an individual source of clear, powerful glareless light. Couplers join any number of units. Special knockouts for conversion to 3 lite. (See accessory listings on page 16.) Widely used in leading war plants.

**Dimensions:** Overall width of reflector, 13"; overall height including reflector, 8 1/8"; length 49 1/2"; channel width 6 1/4"; shipping weight 22 lbs. Easily accessible starters on side of top channel. Reflector surface white "Liquid Plastic". Outside finish Battleship gray "Liquid Plastic"; channel of heavy gauge metal for lifetime use. Reflector of revolutionary, new lifetime non-metal material. Operating voltages 110-125 volts, 220-250 volts, 60 cycle. A. C. only. Has latch fastener.

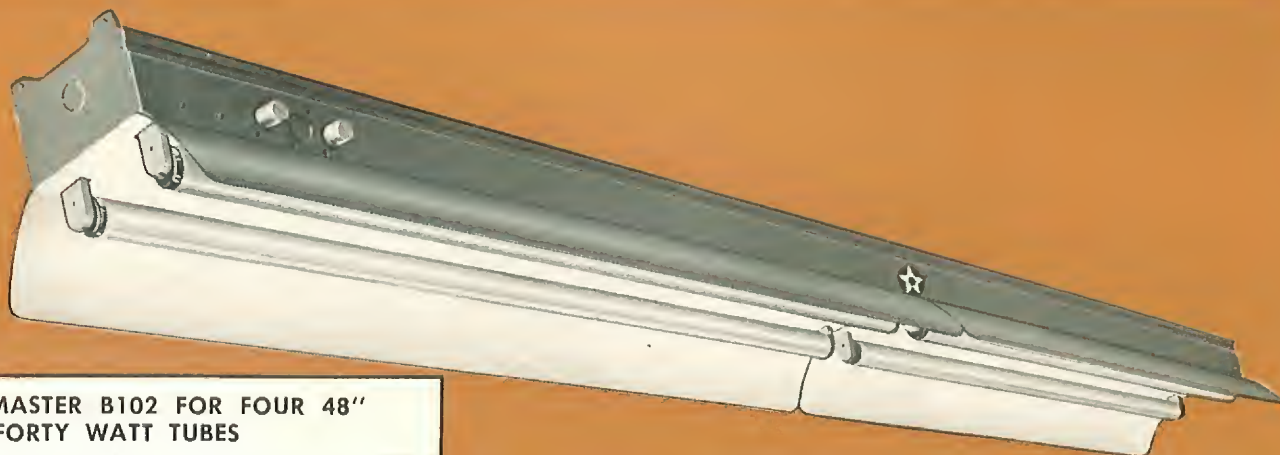
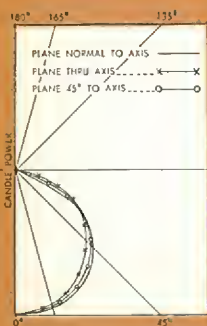
FLUOR-O-MASTER B101 FOR TWO 48" FORTY WATT BULBS						
Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq. ft.	7' to 9'	light	75-87	68-79	52-60
			medium	70-81	64-74	47-54
			dark	70-81	63-73	47-55
7' x 7'	53 sq. ft.	7' to 9'	light	62-72	56-65	42-49
			medium	57-67	52-61	38-45
			dark	57-67	51-60	38-45
8' x 8'	67 sq. ft.	7' to 9'	light	56-65	51-59	39-45
			medium	52-61	48-56	35-41
			dark	52-61	47-55	35-41
9' x 9'	79 sq. ft.	8' to 11'	light	48-56	44-51	32-38
			medium	44-52	41-48	30-35
			dark	44-52	40-47	30-35
10' x 10'	103 sq. ft.	8' to 12'	light	45-52	40-47	31-36
			medium	42-49	39-45	28-33
			dark	42-49	38-44	28-33
11' x 11'	117 sq. ft.	10' to 13'	light	39-46	35-41	26-31
			medium	36-42	33-39	24-28
			dark	36-42	32-36	24-28



Wiring in channel can be made instantly accessible for servicing just by releasing latch fastener to drop reflector.

Locations of knockouts on chassis.





**FLUOR-O-MASTER B102 FOR FOUR 48"  
FORTY WATT TUBES**

Approx Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	76 sq. ft.	7' to 9'	light	75-87	68-79	52-60
			medium	70-81	64-74	47-54
			dark	70-81	63-73	47-55
7' x 7'	103 sq. ft.	7' to 9'	light	62-72	56-65	42-49
			medium	57-67	52-61	38-45
			dark	57-67	51-60	38-45
8' x 8'	134 sq. ft.	7' to 9'	light	56-65	51-59	39-45
			medium	52-61	48-56	35-41
			dark	52-61	47-55	35-41
9' x 9'	158 sq. ft.	8' to 11'	light	48-56	44-51	32-38
			medium	44-52	41-48	30-35
			dark	44-52	40-47	30-35
10' x 10'	206 sq. ft.	8' to 12'	light	45-52	40-47	31-36
			medium	42-49	39-45	28-33
			dark	42-49	38-44	28-33
11' x 11'	234 sq. ft.	10' to 13'	light	39-46	35-41	26-31
			medium	36-42	33-39	24-28
			dark	36-42	32-36	24-28

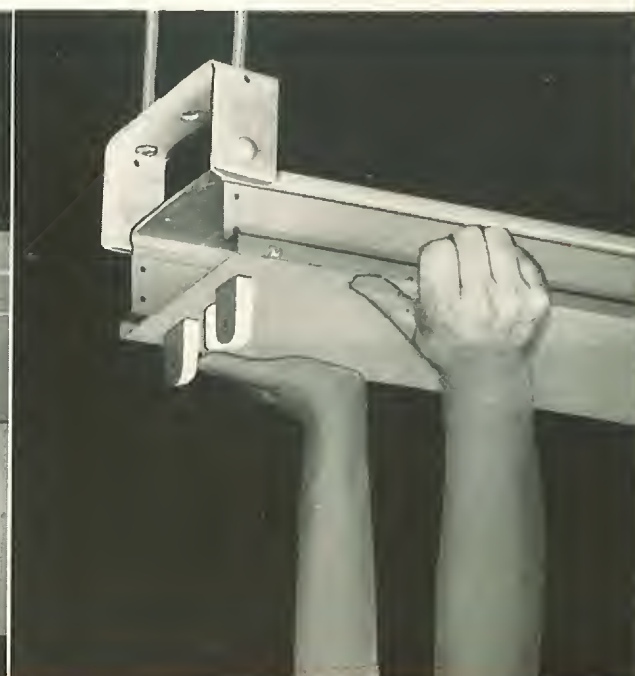
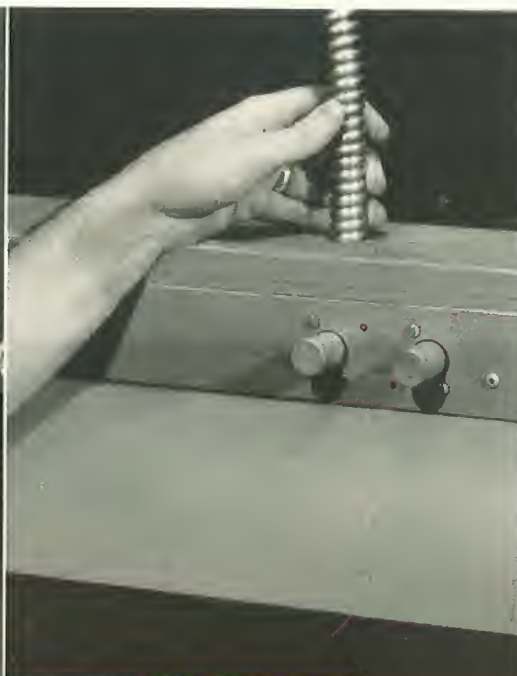
## Fluor-O-Master BRITE-ROW

**MODEL  
B102**

An economical, easily installed Fluor-O-Master with many superior features found in no other make. Takes four T-12 forty-watt fluorescent tubes. Consists of a channel from which two reflectors are suspended, each enclosing two tubes. Easily coupled to additional units to provide a continuous line of light of almost any desired length. Channel end caps have ears for solitary suspension. Available, also, with coupler end pieces for use in a continuous series. Special knockouts provided for conversion to 3 lite. (See accessory listings on page 16.)

*Dimensions:* Over-all reflector width 13"; height including reflector 6 9/16"; over-all length 99"; channel width 6 1/4"; shipping weight 44 lbs.

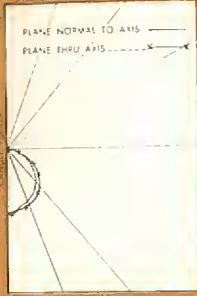
Easily accessible starters on side of top channel. Reflector of revolutionary new non-metal material. Surface fused with white "Liquid Plastic". Outside finish Battleship gray "Liquid Plastic". Channel heavy gauge metal for lifetime use. Operating voltage 110-125 volts. Available also in 220-250 volts, 60 cycle. A. C. only. Has latch fastener.



Knockouts are provided for every type of installation. Leads may enter through end-caps or at several other points along channel.

Units easily suspended by Fluor-O-Master slide hanger-clamp.





# Fluor-O-Master

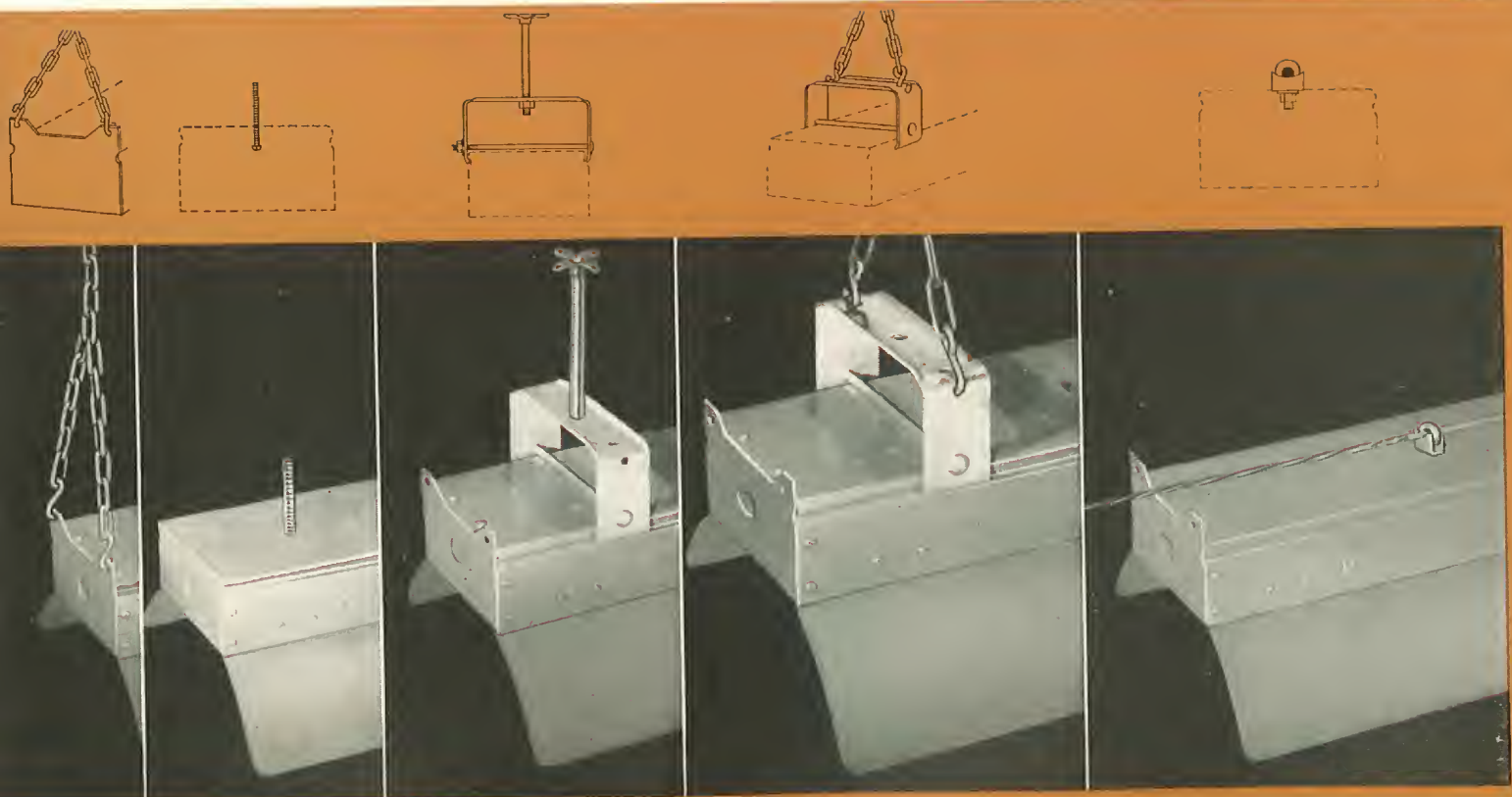
**MODEL  
B105**

**BRITE-ROW**

Made to take three T-12 forty-watt fluorescent tubes, this Fluor-O-Master provides torrents of restful, glareless light at astonishingly low operating cost. This style is frequently used to finish off the end of a continuous line, is also used as separate fixture. May be obtained with coupler to join any number of units end to end.

*Dimensions:* Reflector width 13"; over-all height including reflector 6 7/8"; over-all length 49 1/2"; channel width 6 1/4"; shipping weight 30 lbs. Easily accessible starters on side of top channel. Reflector of revolutionary new non-metal material; surface white "Liquid Plastic". Outside finish Battleship gray; channel of heavy gauge metal for lifetime use. Operating voltages 110-125 volts, or 220-250 volts, 60 cycle. A. C. only. One hand release latch fastener holds reflector to body.

FLUOR-O-MASTER B105 FOR THREE 48" FORTY WATT BULBS						
Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq. ft.	7' to 9'	light	103-119	93-108	70-82
			medium	96-111	87-101	63-75
			dark	96-111	86-100	63-75
7' x 7'	53 sq. ft.	7' to 9'	light	89-103	81-93	61-71
			medium	82-96	75-88	56-65
			dark	82-96	74-86	56-65
8' x 8'	67 sq. ft.	7' to 9'	light	76-89	69-80	52-61
			medium	70-83	65-76	47-55
			dark	70-83	63-75	47-55
9' x 9'	79 sq. ft.	8' to 11'	light	70-81	64-74	47-56
			medium	64-75	60-70	44-51
			dark	64-75	58-68	44-51
10' x 10'	103 sq. ft.	8' to 12'	light	61-70	54-63	41-48
			medium	56-66	52-61	37-44
			dark	56-66	51-59	37-44
11' x 11'	117 sq. ft.	10' to 13'	light	57-67	51-60	39-46
			medium	53-61	49-57	36-42
			dark	53-61	47-56	36-42



**EAR-CHAIN MOUNTING**  
For single suspension by end cap.

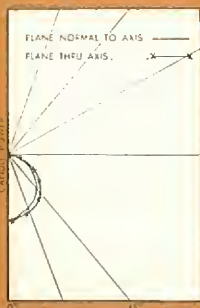
**SURFACE MOUNTING**  
Bolt fastens fixture securely against ceiling.

**STEM MOUNTING**  
Attach stem to slide hanger-clamp with lock nuts

**CONTINUOUS CHAIN SUSPENSION**  
For suspending continuous rows by chains, attach chain to slide hanger-clamp with S-hook.

**MESSANGER CABLE ON CHASSIS**  
For installations where messenger cable is relatively taut, and where fixture is to be serviced without de-mounting, attach messenger cable directly to body.





**FLUOR-O-MASTER B104 FOR SIX 48" FORTY WATT BULBS**

Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	76 sq. ft.	7' to 9'	light	103-119	93-108	70-82
			medium	96-111	87-101	63-75
			dark	96-111	86-100	63-75
7' x 7'	103 sq. ft.	7' to 9'	light	89-103	81-93	61-71
			medium	82-96	75-88	56-65
			dark	82-96	74-86	56-65
8' x 8'	134 sq. ft.	7' to 9'	light	76-89	69-80	52-61
			medium	70-83	65-76	47-55
			dark	70-83	63-75	47-55
9' x 9'	158 sq. ft.	8' to 11'	light	70-81	64-74	47-56
			medium	64-75	60-70	44-51
			dark	64-75	58-68	44-51
10' x 10'	206 sq. ft.	8' to 12'	light	61-70	54-63	41-48
			medium	56-66	52-61	37-44
			dark	56-66	51-59	37-44
11' x 11'	234 sq. ft.	10' to 13'	light	57-67	51-60	39-46
			medium	53-61	49-57	36-42
			dark	53-61	47-56	36-42

## Fluor-O-Master

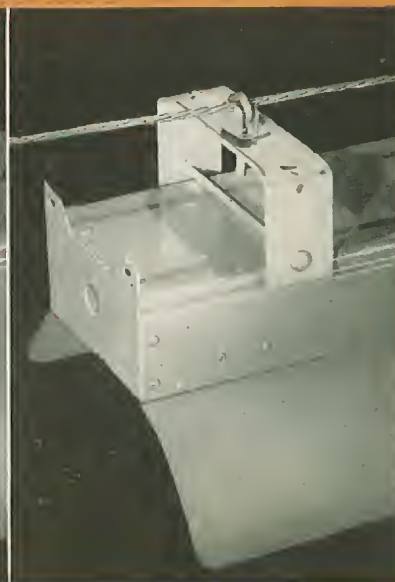
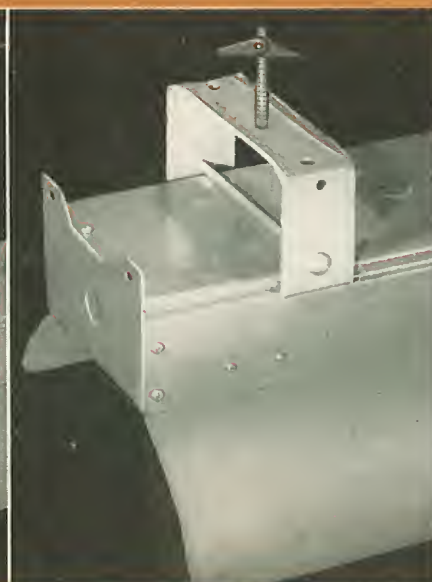
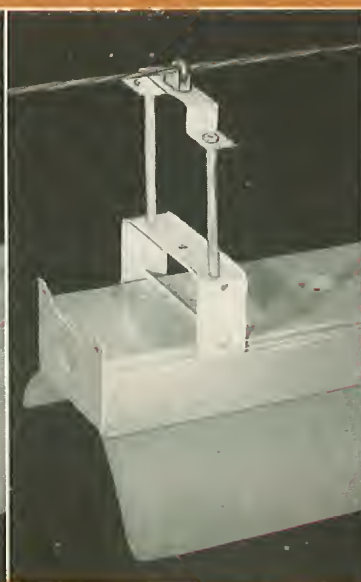
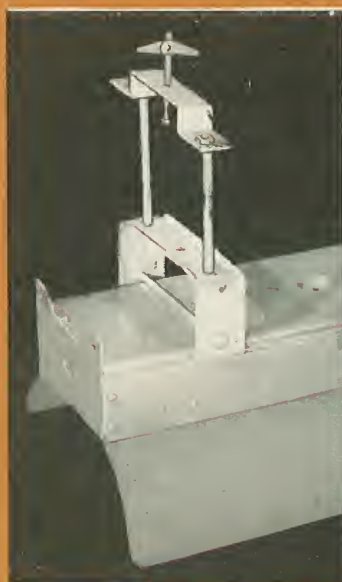
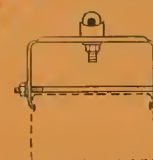
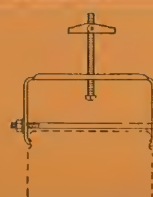
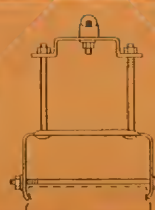
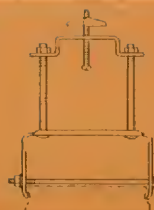
### MODEL B104

### BRITE-ROW

Designed as a means of providing at minimum installation cost, a fatigue saving, day-like light source, adequate even at considerable mounting height. Takes six T-12 forty-watt fluorescent tubes. Consists of a channel from which two reflectors are suspended, each enclosing three tubes. Easily coupled with additional units to provide a continuous line of light of almost any desired length. Channel end caps have ears for solitary suspension. Available, also, with coupler channel — end pieces for continuous series. (See accessory listings on page 16.)

**Dimensions:** Reflector width 13"; height with reflector 6 <sup>1</sup>/<sub>8</sub>"; over-all length 99"; channel width 6 <sup>1</sup>/<sub>4</sub>"; shipping weight 60 lbs.

Easily accessible starters on side of top channel. Reflector of revolutionary new non-metal material; surface coated with white "Liquid Plastic". Outside finish coated with Battleship gray "Liquid Plastic". Channel of heavy metal for lifetime use. Operating voltage 110-125 volts. Available also in 220-250 volts, 60 cycle. A. C. only. Has latch fastener.



#### ALIGNER BAR

Aligner bar assemblies available with rods in 6", 12" and 18" lengths. Aligner rod assembly can be attached to ceiling with toggle-bolt or lag screw.

#### MESSENGER CABLE AND ALIGNER

Aligner bar assembly permits adjustment for slack in messenger cable; attaches to aligner bar with special rod arrangement.

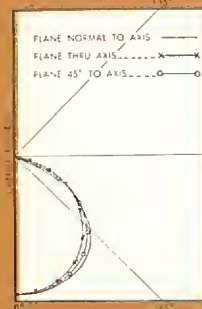
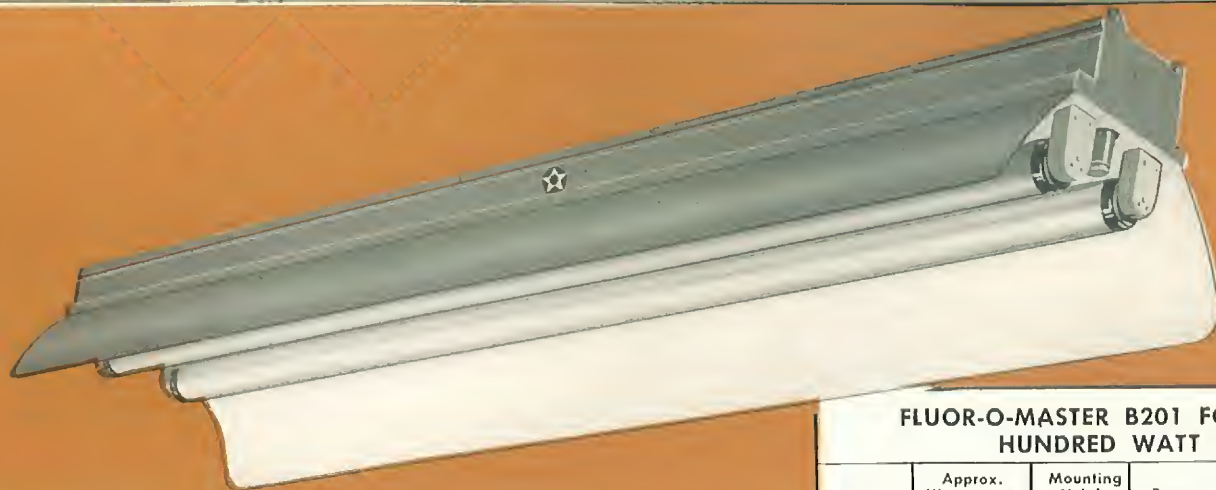
#### CEILING TOGGLE-MOUNTING

Slide hanger-clamp may be attached directly to ceiling with toggle-bolt. Flush-mounting may also be accomplished by attaching channel directly to ceiling, by means of toggle-bolt, without clamp.

#### MESSENGER CABLE ON SLIDE HANGER-CLAMP

For shorter messenger cable installation, where there is no serious sag in cable, attach cable to slide hanger-clamp with bolt-clamp.





# Fluor-O-Master

**MODEL  
B201**

## BRITE-ROW

A super-light that steps up the efficiency of all shifts. Makes possible important installation economies by permitting wider spacing between rows without loss of efficiency. Brite-row takes two T-17 one-hundred-watt tubes. Single unit is frequently used to finish off the end of a continuous line, or as separate unit. Couplers may be obtained to join any number of units end to end. Latch fastener, permanently attached to body may be instantly released with one hand—to release reflector from body, and expose all wiring for servicing. No loose nuts or bolts.

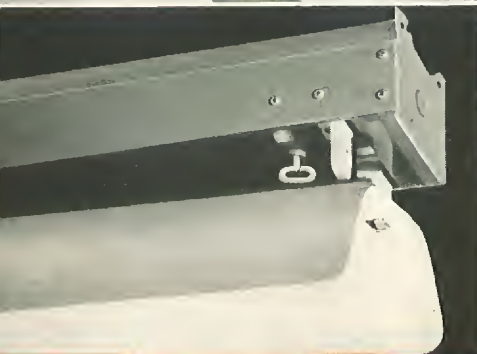
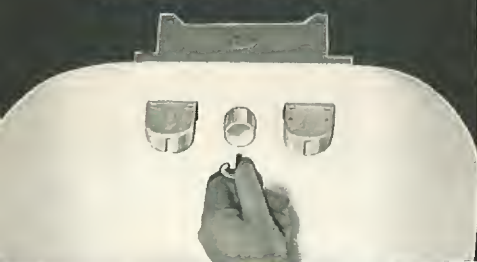
*Dimensions:* Reflector width 16 $\frac{3}{4}$ " height with reflector 7 $\frac{7}{8}$ "; over-all length 62"; channel width 8"; shipping weight 37 lbs.

Easily accessible starters between sockets. Reflector of revolutionary new non-metal material; surface white "Liquid Plastic". Outside finish coated with Battleship gray "Liquid Plastic"; channel of heavy gauge metal for lifetime use. Operating voltages 110-125 volts. Available also in 220-250 volts, 60 cycle. A. C. only.

### FLUOR-O-MASTER B201 FOR TWO 60" HUNDRED WATT BULBS

Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Good	Average	Fair
6' x 6'	38 sq. ft.	8' to 13'	light	115-127	104-115	79-87
			medium	106-117	97-107	72-79
			dark	106-117	95-105	72-79
7' x 7'	52 sq. ft.	9' to 13'	light	84-93	57-63	44-49
			medium	79-87	55-61	41-45
			dark	79-87	53-65	41-45
8' x 8'	67 sq. ft.	9' to 13'	light	66-73	59-65	46-51
			medium	61-67	57-63	43-47
			dark	61-67	55-61	43-47
9' x 9'	84 sq. ft.	10' to 14'	light	50-55	46-51	33-37
			medium	46-51	42-47	32-35
			dark	46-51	42-47	32-35
10' x 10'	98 sq. ft.	11' to 15'	light	43-47	39-43	30-33
			medium	39-43	37-41	26-29
			dark	39-43	35-39	26-29
11' x 11'	118 sq. ft.	12' to 15'	light	33-37	30-33	23-25
			medium	32-35	28-31	21-23
			dark	32-35	28-31	21-23
12' x 12'	147 sq. ft.	12' to 15'	light	30-33	27-30	21-23
			medium	28-31	25-28	19-21
			dark	28-31	25-28	19-21
13' x 13'	167 sq. ft.	12' to 15'	light	23-26	22-24	16-18
			medium	22-24	20-22	14-16
			dark	22-24	20-22	14-16

### EXCLUSIVE RELEASE LATCH

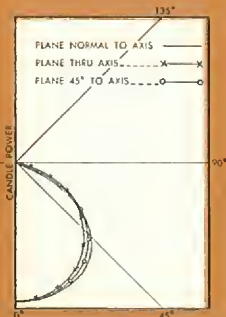


To get at wiring for servicing, permanent latch fastener may be released with a single movement of one hand. Reflector then drops away from body, exposing inside of channel. No screw driver or wrench necessary, no nuts or bolts.

Easily accessible starter on units taking 100 watt lamps, is located in reflector, between lamp-holders.

Starter is removable from all models without removing tubes. On models taking 40 watt lamps, starter is on side of channel.





### FLUOR-O-MASTER B202 FOR FOUR 60" HUNDRED WATT BULBS

Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	76 sq. ft.	8' to 13'	light	115-127	104-115	79-87
			medium	106-117	97-107	72-79
			dark	106-117	95-105	72-79
7' x 7'	104 sq. ft.	9' to 13'	light	84-93	57-63	44-49
			medium	79-87	55-61	41-45
			dark	79-87	53-65	41-45
8' x 8'	134 sq. ft.	9' to 13'	light	66-73	59-65	46-51
			medium	61-67	57-63	43-47
			dark	61-67	55-61	43-47
9' x 9'	168 sq. ft.	10' to 14'	light	50-55	46-51	33-37
			medium	46-51	42-47	32-35
			dark	46-51	42-47	32-35
10' x 10'	196 sq. ft.	11' to 15'	light	43-47	39-43	30-33
			medium	39-43	37-41	26-29
			dark	39-43	35-39	26-29
11' x 11'	236 sq. ft.	12' to 15'	light	33-37	30-33	23-25
			medium	32-35	28-31	21-23
			dark	32-35	28-31	21-23
12' x 12'	294 sq. ft.	12' to 15'	light	30-33	27-30	21-23
			medium	28-31	25-28	19-21
			dark	28-31	25-28	19-21
13' x 13'	334 sq. ft.	12' to 15'	light	23-26	22-24	16-18
			medium	22-24	20-22	14-16
			dark	22-24	20-22	14-16

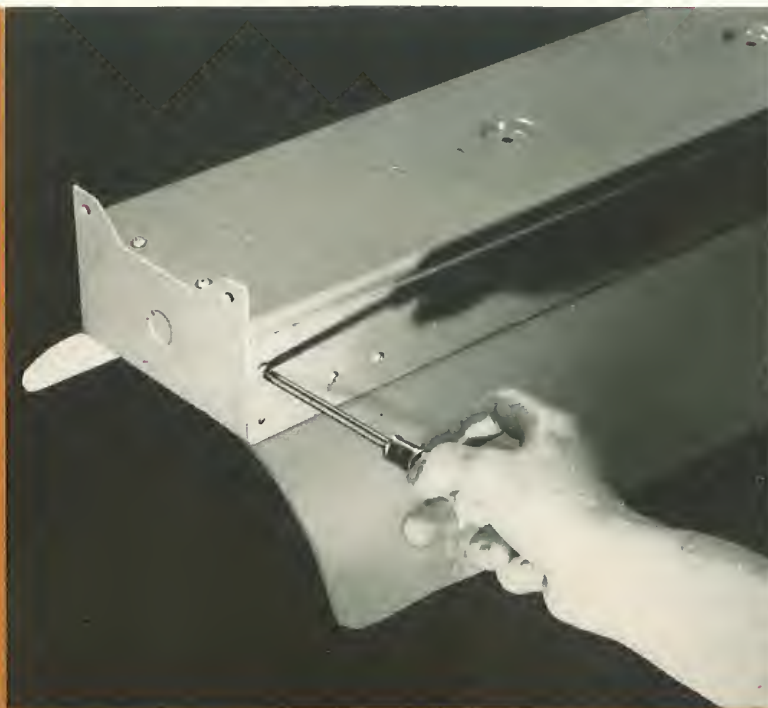
## Fluor-O-Master BRITE-ROW

### MODEL B202

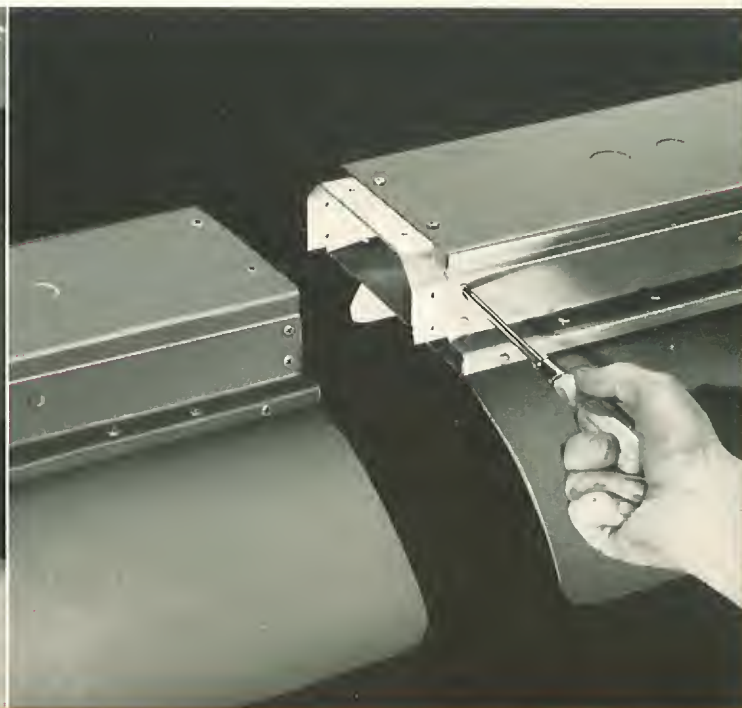
Most powerful Fluor-O-Master made. More and better light at lower installation cost than has ever been offered before. The most up-to-date continuous row unit yet made. Takes four T-17 one-hundred watt fluorescent tubes. Consists of a continuous channel from which two reflectors are suspended, each enclosing two lamps. Easily coupled to additional units to provide a continuous line of light of any desired length. Channel end caps have ears for solitary suspension. Available also, with coupler end pieces for continuous series. (See accessory listings on page 16.) May be had for 254 volts with one ballast for all four tubes.

**Dimensions:** Reflector width 16 $\frac{3}{4}$ "; height with reflector 7 $\frac{7}{8}$ "; over-all length 124"; channel width 8"; shipping weight 74 lbs.

Easily accessible starters between sockets. Reflector of revolutionary new non-metal material; surface coated with white "Liquid Plastic". Outside finish Battleship gray "Liquid Plastic"; channel of heavy gauge metal. Operating voltage 110-125 volts. 220-250 volts available. 60 cycle A. C. only. Special latch fastener.



End piece is removed when Brite-row units are coupled together.



Brite-row channel sections are paired together with coupler, providing unobstructed wireway the length of the row.





# ENGINEERING

## *Fluor-O-Master*

# BRITE-ROW

# INSTALLATION

### THERE ARE FOUR DIFFERENT TYPES OF BRITE-ROW SECTIONS

1. **STANDARD SECTION**—This is a complete unit wired and ready for use as a separate fixture. Available in 49½" and 99" fixtures using 40 watt tubes and 62" and 124" fixtures using 100 watt tubes. Used principally where single units are desired. This model may be individually wired to its own outlet—or it may be connected with the nearest Brite-row continuous wireway.
2. **END SECTION**—(indicated on order by ES after model number.) This type is intended for use only at the end of an inter-connected line of Brite-row units. It comes with an endpiece in one end and a coupler in the other. The end sections are available in 49½" and 99" sections using 40 watt tubes and 62" and 124" sections using 100 watt tubes. In series where a short section is needed it is desirable to locate the short section at the end of the line, rather than in the middle—as it provides greater flexibility in extending or shortening the series if requirements change.
3. **MIDDLE SECTION**—(indicated on order by MS after model number.) Middle sections are equipped with a coupler for one end only. The other end is used for insertion of adjacent section's coupler. Both ends are open to form continuous wireway. This section comes in 49½" and 99" sections using 40 watt tubes and 62" and 124" sections using 100 watt tubes.
4. **BLANK SECTION**—(indicated on order by BS after model number.) This Brite-row unit consists of an unwired body with a bottom plate on the channel instead of a reflector. It is used to continue the Brite-row wireway, over certain locations in the plant where a light is not needed. It comes in 49½", 62", 99", and 124" lengths, and is equipped with a coupler for one end. Other end is left open for insertion of adjacent unit's coupler. Both ends are open to form continuous wireway. Blank section is shown below, coupled to an end section. **BLANK SECTION MAY ALWAYS BE CONVERTED TO A FIXTURE AT A FUTURE TIME.** It is available for middle section or end section, specify when ordering

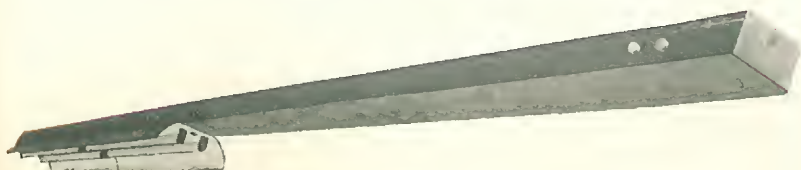
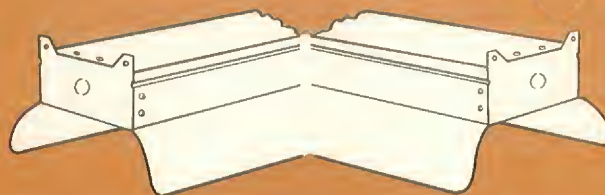
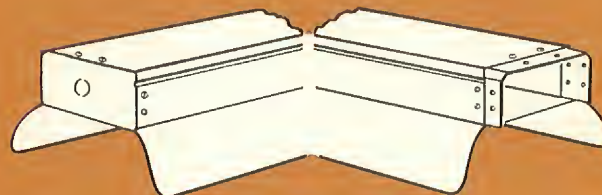


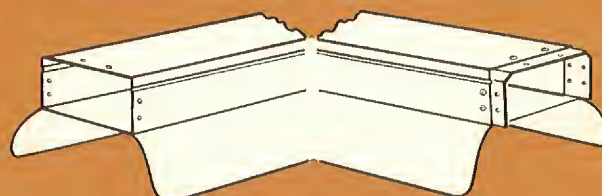
Illustration above shows the three types of Brite-row sections used in continuous series installations. All are available in 49½" and 99" forty watt sections and 62" and 124" one hundred watt sections.



Standard Section



End Section (ES)



Middle Section (MS)



Blank Section and Cover (BS)





## SUSPENSION OF BRITE-ROW

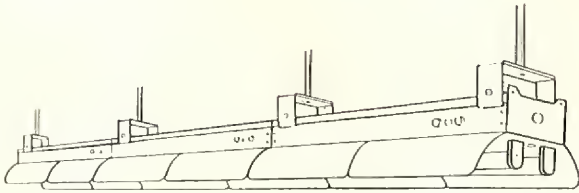
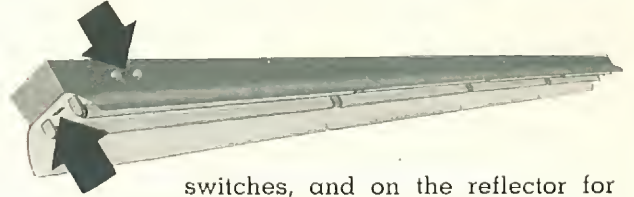


Illustration above shows how continuous lines of Brite-rows should be mounted—One slide hanger-clamp, messenger cable clamp, or suspension chain support as close as possible to every second coupling, and one additional cable clamp, hanger, or chain support at each end of the line.

Conduit wiring can be entirely eliminated saving great quantities of critical materials. The channel of Brite-row is actually the wiring system as the main lines of current are run thru the channel itself.

## CONVERSION TO THREE OR SIX TUBE UNITS

You can convert a forty watt two tube Brite-row unit to a three tube model, or a forty watt four tube to a six tube, very easily. Knockouts are provided on the channel for additional starter



switches, and on the reflector for added sockets. The wiring necessary to add sockets and starters for the extra tube is so simple that it can be done in a few minutes by any electrician or maintenance man. This greatly increases the flexibility of a Brite-row installation, as it enables you to increase your light output when and as needed.

## WHAT TO ORDER IN ENGINEERING A BRITE-ROW INSTALLATION

Chart shows quantity of each type of section, clamps, tubes for given length of rows. For the sake of greater flexibility we have recommended a 49½" or 62" section at the end of rows, rather than in the middle, where such size sections are necessary. Note from the chart, however, that 49½" or 62" Middle sections are also available.

FOR 40 WATT SECTIONS

Length of Row	MS (middle-section)		ES (end section)		Slide Hanger-Clamps	No. Tubes per Row	
	99"	49½"	99"	49½"		2 per reflector*	3 per reflector*
12' 5"			1	1	3	6	9
16' 7"			2		3	8	12
20' 8"	1		1	1	4	10	15
24' 10"	1		2		4	12	18
28' 11"	2		1	1	5	14	21
33' 1"	2		2		5	16	24
37' 2"	3		1	1	6	18	27
41' 4"	3		2		6	20	30
45' 5"	4		1	1	7	22	33
49' 7"	4		2		7	24	36
53' 8"	5		1	1	8	26	39
57' 10"	5		2		8	28	42
62' 11"	6		1	1	9	30	46
67' 1"	6		2		9	32	48
71' 2"	7		1	1	10	34	51
75' 4"	7		2		10	36	54
79' 5"	8		1	1	11	38	57
83' 7"	8		2		11	40	60
87' 8"	9		1	1	12	42	63
91' 10"	9		2		12	44	66
94' 11"	10		1	1	13	46	69
96' 1"	10		2		13	48	71
100' 2"	11		1	1	14	50	74

FOR 100 WATT SECTIONS

Length of Row	MS (middle-section)		ES (end section)		Slide Hanger-Clamps	No. Tubes 2 per reflector*
	124"	62"	124"	62"		
15' 6"			1	1	4	6
20' 8"			2		5	8
25' 10"	1		1	1	6	10
31'	1		2		7	12
36' 2"	2		1	1	8	14
41' 4"	2		2		9	16
46' 6"	3		1	1	10	18
51' 8"	3		2		11	20
56' 10"	4		1	1	12	22
62'	4		2		13	24
67' 2"	5		1	1	14	26
72' 4"	5		2		15	28
77' 6"	6		1	1	16	30
82' 8"	6		2		17	32
87' 10"	7		1	1	18	34
93'	7		2		19	36
98' 2"	8		1	1	20	38
103' 4"	8		2		21	40
108' 6"	9		1	1	22	42
113' 8"	9		2		23	44
118' 10"	10		1	1	24	46
124'	10		2		25	48
129' 2"	11		1	1	26	50

\*99" and 124" units have 2 reflectors.

49½" 2 tube unit is No. B101

49½" 3 tube unit is No. B105

99" 4 tube unit is No. B102

99" 6 tube unit is No. B104

62" 2 tube unit is No. B201

124" 4 tube unit is No. B202

(1) Above Charts are based on the smallest number of Brite-row units needed. 99" and 124" sections are recommended in order to cut down on installation time and cost.

(2) If installation demands more flexibility substitute two small sections for a large section wherever desired.

(3) In ordering row lengths not shown always specify 2 end sections (ES) per row. The balance required will be middle sections (MS). Order one slide clamp-hanger to place at each junction and one to place at each end of the row.



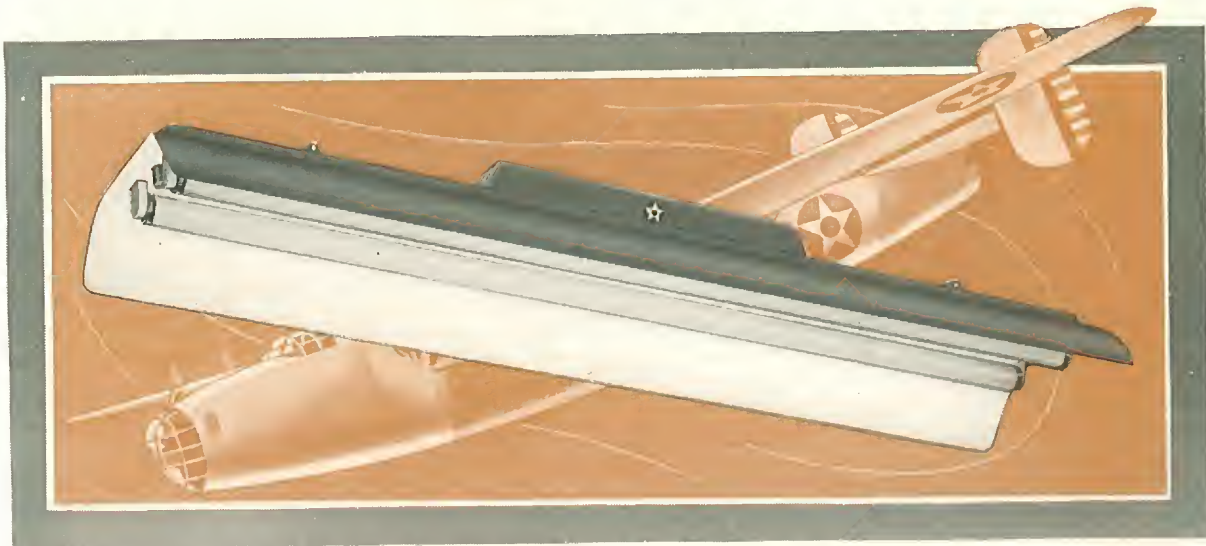




# Fluor-O-Master

## BOMBER

(REG. U. S. PAT. OFFICE)



In this unit Electro has included every important engineering improvement developed since the beginning of fluorescent lighting. Over 200,000 Fluor-O-Master "Bombers" are now in use in America's largest plants, armament factories, and other war industries. Over 78,000 Bombers serve the Ford bomber plant alone, world's biggest fluorescent system. It is without hesitation, therefore, that Electro unconditionally guarantees that the performance of this unit cannot be excelled by any other.

This unit has total lumen output of over 8,400. As a result, fewer fixtures are required, and wider spacing and higher mounting will give satisfactory results.

Turning two nuts lowers reflector, exposing all wiring. Knockouts provided for any type of installation. Unique chain bracket permits suspension at any angle. Starter is replaceable without removing lamps.

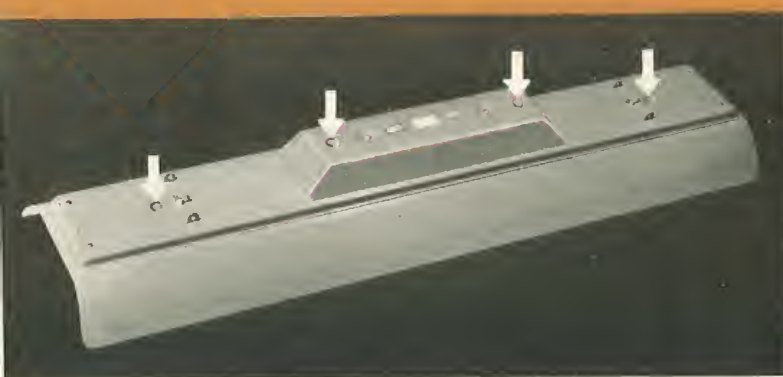
New type *non-metal* reflector guaranteed to serve as satisfactorily as metal. Perfect 75° cut-off. MEETS U. S. BUREAU OF STANDARDS specifications.

Reflector surface is lined with Electro's exclusive new "Liquid Plastic". (Registered U. S. Patent Office.) This amazing surfacing is guaranteed for life against chipping, cracking, or tarnishing. It is considerably more brilliant than vitreous, and is glareless and more durable.

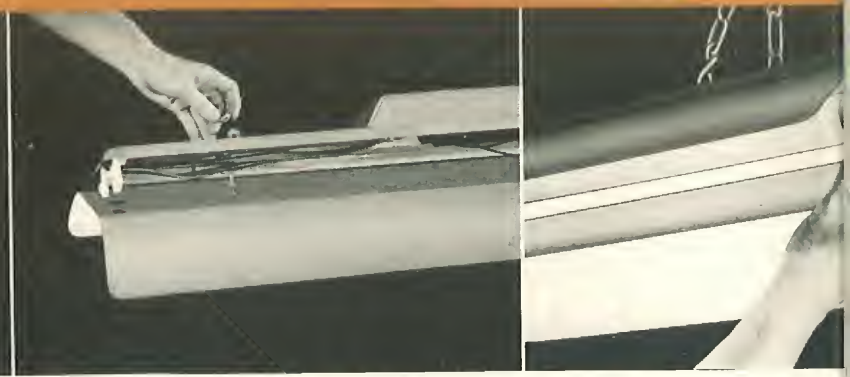




# Fluor-O-Master



Picture 1



Picture 2

FLUOR-O-MASTER B100 FOR TWO 48" FORTY WATT BULBS						
Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq. ft.	7' to 9'	light medium dark	53-62 49-57 49-57	49-56 44-52 44-51	36-42 32-38 32-38
7' x 7'	53 sq. ft.	7' to 9'	light medium dark	41-48 39-45 39-45	37-43 35-41 34-40	28-33 27-31 27-31
8' x 8'	67 sq. ft.	7' to 9'	light medium dark	30-35 27-32 27-32	26-31 26-30 25-29	20-24 19-22 19-22
9' x 9'	79 sq. ft.	8' to 11'	light medium dark	25-29 23-27 23-27	23-27 22-25 22-25	17-20 16-19 16-19
10' x 10'	103 sq. ft.	8' to 12'	light medium dark	19-22 18-20 18-20	17-20 16-19 15-18	13-15 11-13 11-13
11' x 11'	117 sq. ft.	10' to 13'	light medium dark	17-20 16-19 16-19	16-18 15-17 15-17	12-14 11-13 11-13

## FEATURES

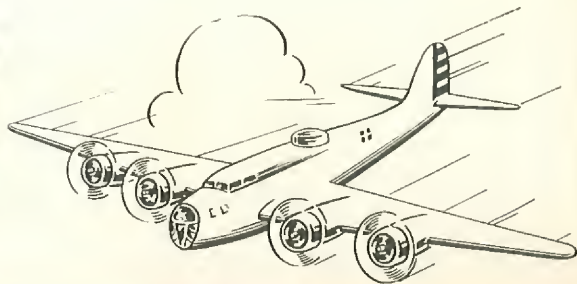
PICTURE NO. 1—KNOCKOUTS. The Bomber is suitable for any type of suspension, and has knockouts for all purposes.

PICTURE NO. 2—SERVICING. It is easy to service the Fluor-O-Master Bomber because all wiring can be exposed merely by turning two nuts which drop reflector. The wiring is so simple and efficient that users almost never have occasion to make any repairs or replacements. The ballasts are Underwriters approved and are the finest obtainable.

PICTURE NO. 3—STARTER. Note that starter is located between sockets at each end of the Bomber so that they may be removed without disturbing tubes.



# **BOMBER**



**Picture 3**



**Picture 4**



**Picture 5**



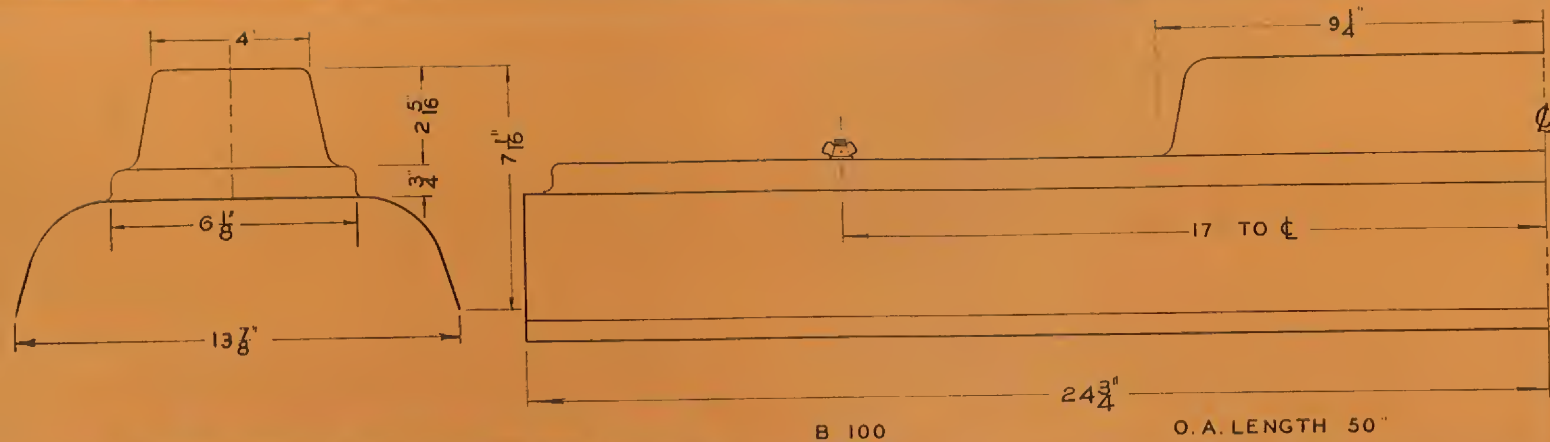
**Picture 6**

PICTURES NO. 4 and 5 — MOUNTING Fluor-O-Master Bomber may be suspended by chains at any angle from chain hanger shown in Picture No. 4. Knockouts are also provided for attachment of conduits if stem mounting is preferred as per Picture No. 5. Flush mounting is accomplished by screwing housing directly to ceiling or outlet box—no bracket necessary.

PICTURE NO. 6—PLUG-IN INSTALLATION. For quick conversion from incandescent to fluorescent lighting, the Fluor-O-Master Bomber may be equipped with the U.L. approved rubber cord and plug. This enables users to provide current for the Bomber simply by plugging into any ordinary incandescent socket or wall plug.







# *Fluor-O-Master* (REG. U. S. PAT. OFFICE) **BOMBER** **SPECIFICATIONS**

This unit is completely wired and ready for use, including ballast, starter switches, starter switch sockets, and lamp holders.

**CHANNEL:** One-piece channel and ballast mounting, made of heavy gauge metal. All wiring is completely contained within this channel. Exterior is coated with heavy Battleship gray "Liquid Plastic", guaranteed for life against normal hard usage. Two 1/2" knockouts and two 3/8" knockouts are provided on top of housing. Chain hanger brackets also are attached to top of housing. Channel is 5 1/8" wide x 50" long. Height of ballast hump in center is 3 1/16". Height overall 7 1/8".

**REFLECTOR:** Reflector is of revolutionary new non-metal material, AS SPECIFIED BY U. S. BUREAU OF STANDARDS. Surfaces are fused with lifetime "Liquid Plastic", the most durable and brilliant lining available for the purpose. This flawless, satin smooth surface distributes the light without glare, and with amazingly low absorption. Average minimum reflection factor for Fluor-O-Master Bomb-

er is 85%. Reflector-shape has been scientifically determined after months of experiment, as the most efficient, practical contour for the vast majority of factory installations. A "Liquid Plastic" reflector lining will not discolor or craze regardless of atmospheric conditions or any other normal influence. The exterior of the reflector is treated with "Liquid Plastic" in Battleship gray. By releasing two nuts it exposes instantly all wiring in channel. No bolts or rivets are fastened to the reflecting surface. Lamp holders and starters extend through reflector without being fastened to it.

**LAMPS:** Takes 2 forty-watt T-12 forty-eight inch daylight or white fluorescent tubes. Tubes are so located that the reflector edge provides a shielding angle of approximately 16° for the bulb farthest from reflector edge. Average reflection factor 85%.

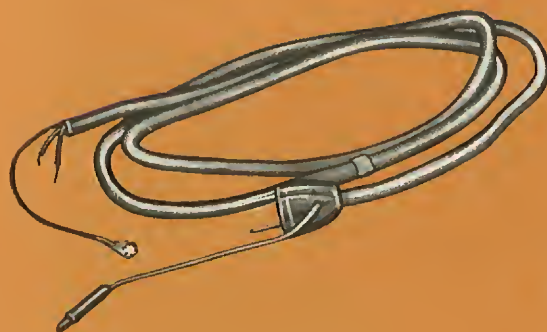
**BALLAST:** Finest Underwriters approved ballast. Power factor of at least 90%.

**STARTERS:** Standard replaceable starters, located between sockets at each end of reflector, may be removed without disturbing lamp or reflector.

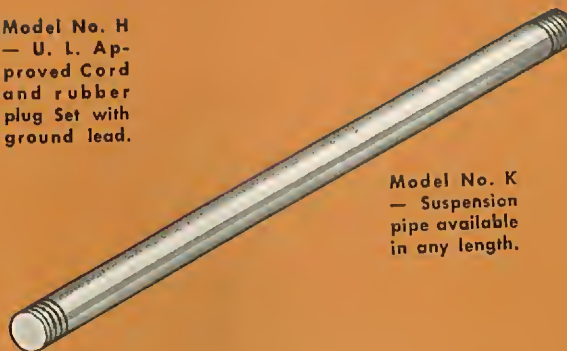
**SOCKETS:** Turn-Lock lamp holders of durable plastic.

**SHIPPING WEIGHT:** 23 pounds.

**APPROVED AND GUARANTEED:** All Fluor-O-Master Bombers bear label of Underwriters Laboratory, are inspected and approved by E.T.L., and are in addition protected by the famous Electro unconditional guarantee of satisfaction.



Model No. H  
— U. L. Approved Cord  
and rubber  
plug Set with  
ground lead.



Model No. K  
— Suspension  
pipe available  
in any length.

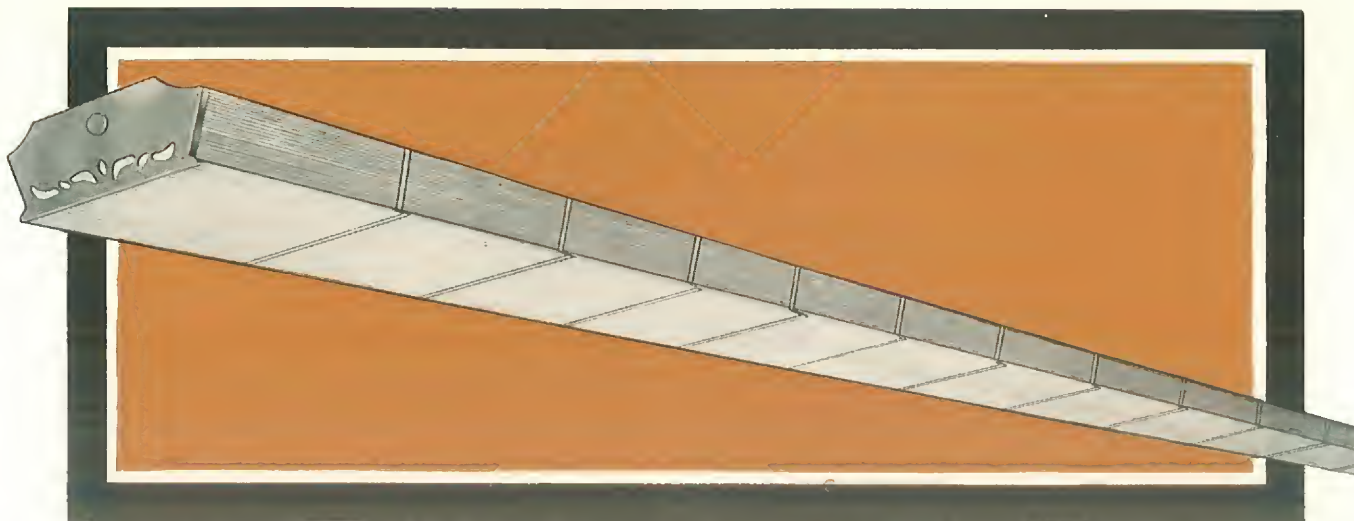


Model No. F  
— Suspension  
chains.



# Fluor-O-Master

## U.R.C.



Originally developed by the Utilities Research Commission, after two years of laboratory work and experiments, this unit is one of the most important lighting engineering achievements.

Unsightly contrasts between light sources and ceiling are eliminated. Glare is filtered out. The light is diffused softly and evenly, with practically no loss of foot candles in the filtering. The Fluor-O-Master U. R. C. Luminaire distributes perfect illumination at a broad angle, in every effective direction . . . without blind spots. This remarkable performance is achieved by means of a new type of glass diffuser-pane, and by scientifically established location and proportions for reflecting surfaces on the body.

Not only is this unit easy on the eyes literally—but it is also highly attractive. It is designed for individual suspension or for use in long continuous rows throughout an entire plant or large

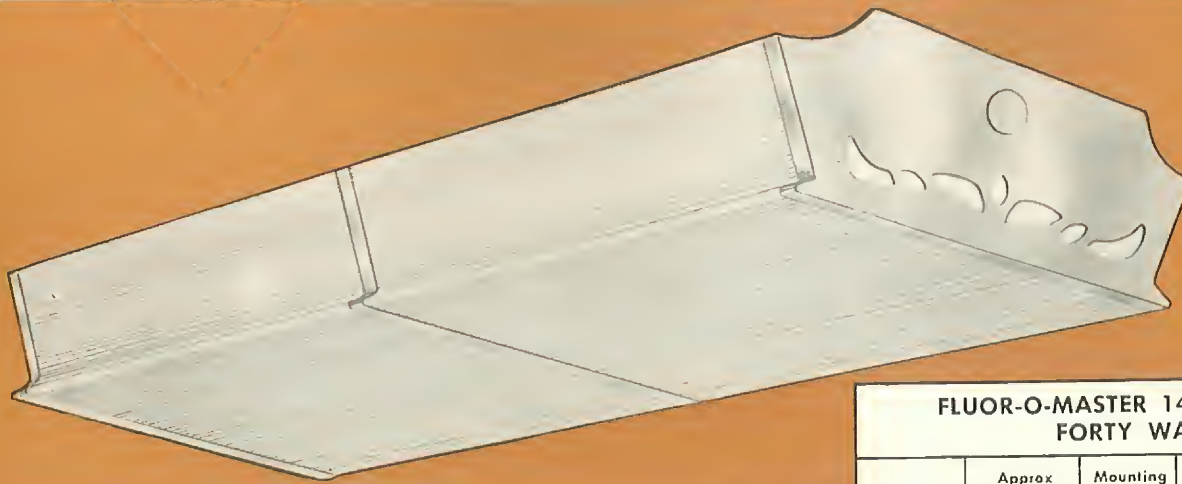
general office. Another major advantage of this Luminaire is that it may be installed with greater speed and ease than any other permanent fluorescent fixture on the market. The whole fixture, completely wired and ready for use, is attached just by sliding it onto Electro's exclusive suspension brackets set in the ceiling at intervals the length of the fixture.

Relamping is accomplished in a twinkling by sliding out side glass panels. Turning two thumb screws drops the bottom panel of the wireway enclosure to make wiring accessible.

High illumination values of 50 to 100 foot candles can be obtained with this Fluor-O-Master with exceedingly low surface brightness. In addition, to all these unusual merits, the Fluor-O-Master U. R. C. Luminaire is so priced as to make it for many purposes, the most economical type of unit on the market.







# Fluor-O-Master

**MODEL  
1448**

**U.R.C. FLUSH MOUNTED  
CONTINUOUS ROW LIGHT**

Can be used individually or coupled in series, with chassis inter-connected to comprise a single continuous wireway of any desired length. Takes four T-12 forty-watt fluorescent tubes. Knockout concealed by ornamental disc in center of end piece provides opening for wire to connect units coupled in continuous line. Starters are located just above sockets for each tube, and may be removed without disturbing tubes.

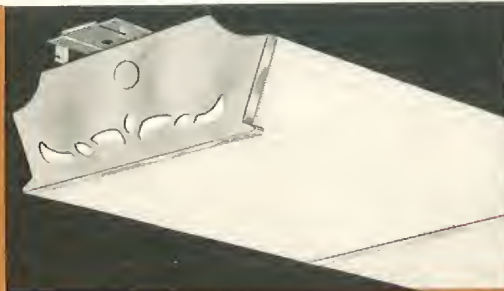
*Dimensions:* Length 48 $\frac{3}{4}$ ", width 18 $\frac{3}{4}$ ", height 7 $\frac{1}{2}$ " Illustrations below show how unit is flush mounted by means of simple brackets set in ceiling. Shipping weight 59 lbs.

Reflector surface fused with white "Liquid Plastic" Channel is of heavy gauge metal for lifetime use. Diffuser panes are specially designed glass with mathematically determined corrugation Operating voltage 110-125 volts, 60 cycle A. C.

## FLUOR-O-MASTER 1448 FOR FOUR 48" FORTY WATT BULBS

Approx Spacing	Approx Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq ft	7' to 9'	light	92-109	84-99	64-76
			medium	82-96	76-91	57-67
			dark	76-91	73-86	55-65
7' x 7'	53 sq ft	7' to 9'	light	66-78	60-71	46-54
			medium	59-68	55-65	58-48
			dark	55-65	52-62	40-47
8' x 8'	67 sq ft	7' to 9'	light	53-62	48-61	37-43
			medium	47-55	44-51	32-39
			dark	43-51	41-49	32-35
9' x 9'	79 sq ft	8' to 11'	light	37-48	36-42	27-33
			medium	35-41	33-39	24-29
			dark	31-39	31-37	18-26
10' x 10'	103 sq ft	8' to 12'	light	33-40	31-36	24-28
			medium	30-35	28-33	21-25
			dark	28-33	26-32	20-24
11' x 11'	117 sq ft	10' to 13'	light	26-31	24-28	18-21
			medium	23-27	22-26	16-19
			dark	22-26	20-25	15-18
12' x 12'	141 sq ft		light	24-28	21-26	17-19
			medium	21-24	19-23	15-18
			dark	19-23	18-22	14-17

*Fast,  
Easy  
Suspension*



Super-safe, time-saving hanger bracket cuts installation time and couples units more securely

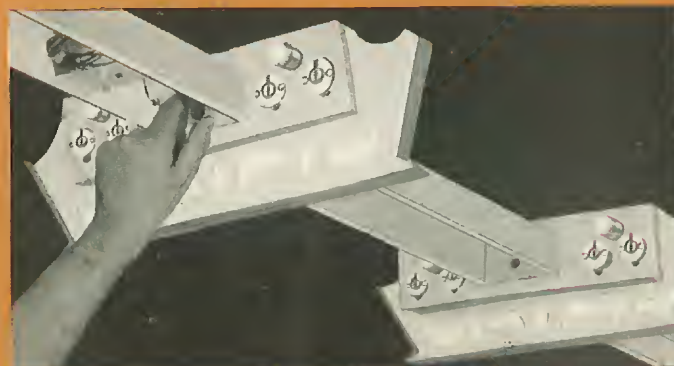


In just a few minutes you can suspend an entire line for an office installation

*Quickly  
Installed*



*Easily  
Serviced*

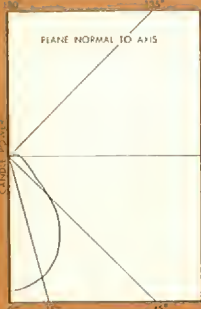


Coupling nipple links units instantly, firmly. Provides continuous wiring inside channel all the way—a unique Fluor-O-Master advantage.



Removable ornamental disc conceals end-piece knockout in units wired individually and in units used to finish off end of a line.





# **FLUOR-O-MASTER 1448H FOR FOUR 48" FORTY WATT BULBS**

Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq. ft.	7' to 9'	light	92-109	84-99	64-76
			medium	82-96	76-91	57-67
			dark	76-91	73-86	55-65
7' x 7'	53 sq. ft.	7' to 9'	light	66-78	60-71	46-54
			medium	59-68	55-65	48-48
			dark	55-65	52-62	40-47
8' x 8'	67 sq. ft.	7' to 9'	light	53-62	48-61	37-43
			medium	47-55	44-51	32-39
			dark	43-51	41-49	32-35
9' x 9'	79 sq. ft.	8' to 11'	light	37-48	36-42	27-33
			medium	35-41	33-39	24-29
			dark	31-39	31-37	18-26
10' x 10'	103 sq. ft.	8' to 12'	light	33-40	31-36	24-28
			medium	30-35	28-33	21-25
			dark	28-33	26-32	20-24
11' x 11'	117 sq. ft.	10' to 13'	light	26-31	24-28	18-21
			medium	23-27	22-26	16-19
			dark	22-26	20-25	15-18
12' x 12'	141 sq. ft.		light	24-28	21-26	17-19
			medium	21-24	19-23	15-18
			dark	19-23	18-22	14-17

## *Fluor-O-Master*

**MODEL 1448H**

**U. R. C. CANOPY SUSPENDED CONTINUOUS ROW LIGHT**

Same as U. R. C. MODEL NO. 1448, except for addition of stems and canopy for suspended mounting. Can be used as an individual fixture—or can be suspended in a continuous row with chassis coupled to comprise a single wireway for lines of any length.

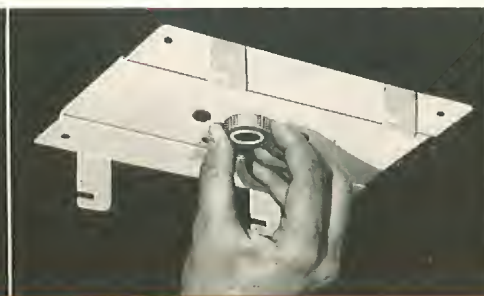
Takes four T-12 forty-watt fluorescent tubes. Knockout concealed by ornamental disc in center of end piece provides opening for wire to connect units coupled in continuous line. Starters are located just above sockets for each lamp, and may be removed without disturbing bulbs.

Dimensions: Length 48 3/4"; width 18 3/4"; height overall 38". Illustrations below show how unit is flush mounted by means of simple brackets set in ceiling. Shipping weight 59 lbs.

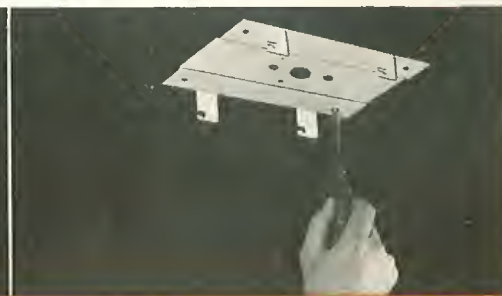
Reflector surface fused with white "Liquid Plastic". Channel is of heavy gauge metal for lifetime use. Diffuser panes are specially designed glass with mathematically determined corrugations. Operating voltage 110-125 volts, 60 cycle, A. C.



Only one bracket is needed to suspend isolated fixtures, since bracket can also be hooked to center of body



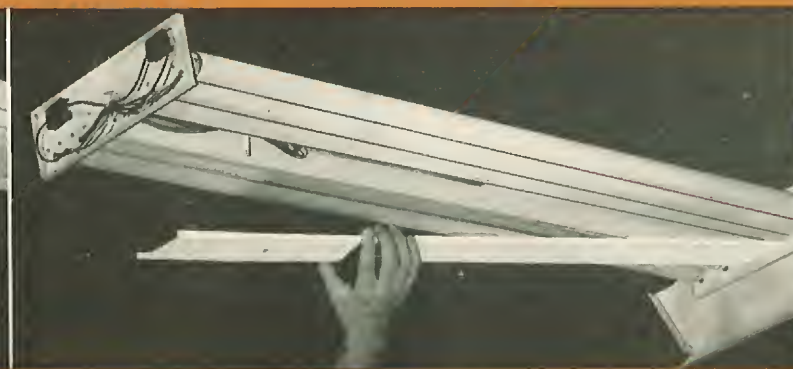
Bracket can be attached directly to outlet box, if box is suitably located.



Bracket can be strongly fastened to ceiling with toggle bolt or lag screw.



End-Plate is easily removed without disturbing fixture, to service end-wiring.

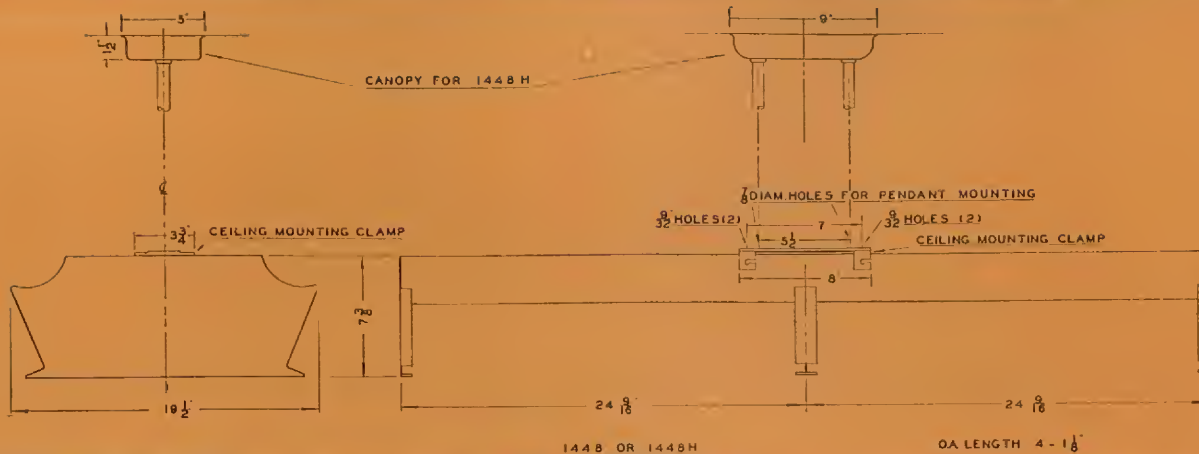


Wiring in body may be made accessible in a twinkling by removing a couple of wing nuts to release channel plate.



Easily accessible starters may be removed without disturbing tubes.





## Fluor-O-Master U.R.C. SPECIFICATIONS

This unit is completely wired and ready for use, including ballast, starter switches, starter switch sockets, and lamp holders. It is designed so that it may be coupled with additional similar units for a continuous wireway channel. Available also in models equipped for pendant hanging which may be similarly joined in continuous rows.

**LAMPS:** Four T-12 forty-watt 48" white fluorescent tubes. Illumination values up to 100 foot candles. Brightness readings do not exceed 0.8 candle power per square inch on any panel sighted at any angle. This is approximately 1/4 the brightness of a bare tube.

**CHANNEL:** Channel is so constructed as to provide a continuous wireway for interconnected units. Unlike other fluorescents of this type, all the wiring for any type of continuous row installation is included inside the channel. All wiring in channel is made accessible for servicing without even removing tubes, just by turning two bolts to drop bottom plate. Channel is of heavy gauge steel. Electro's exclusive white "Liquid Plastic" completely coats all exterior surfaces and reflecting panels on the body. Knockouts in top of channel provide openings for attaching canopy stems, and for tapping current-sources.

**SOCKET PANELS:** A metal panel at each end of the channel is fitted with lampholders. All four starter switches are located in these panels—each starter above the socket of the lamp it serves.

Starters may be removed without opening channel, disturbing lamps, or glass panels.

**END PLATES:** Handsome heavy gauge metal end-plates, with ornamental louvres piercing metal. Translucent plastic seals these louver openings against dust, but permits light to stream through—providing a very attractive effect, and helping to eliminate "blind" spots at ends. Knockout in end-plate is concealed by ornamental disc, which may be removed so as to knockout for coupling and wiring continuous lines of fixtures.

**COUPLING:** Units are coupled by means of coupling nipple inserted through knockouts in end-pieces of units butted together. Wiring for continuous wireway is carried from one channel section to the next through this nipple. Fixtures are locked together, in additions, by mounting bracket which overlaps touching end of adjacent fixture, and fastens ends of both fixtures to ceiling, or to canopy stems. Suspension bracket gives perfect alignment of continuous row installation. Consists of a sturdy metal plate 8 x 3 1/2", which has a notched ear at each corner. When used to suspend a single fixture, only one bracket is needed, as center of channel is hooked onto notches in ears of suspension bracket.

**DIFFUSING PANES:** Three panes of special prismatic ribbed glass with ground edges, enclose body and channel. Side panes have transmission factor of 35%. This factor is uniform throughout the pane. Bottom pane has transmission factor of 85%.

**REFLECTOR:** Reflector surfaces are lifetime "Liquid Plastic", the most brilliant and durable reflector coating known. Average reflection factor of at least 85%. By releasing two nuts, reflector may be lowered to expose instantly all wiring in channel.

**BALLAST:** Finest U. L. approved ballast on the market. Power factor of at least 90%.

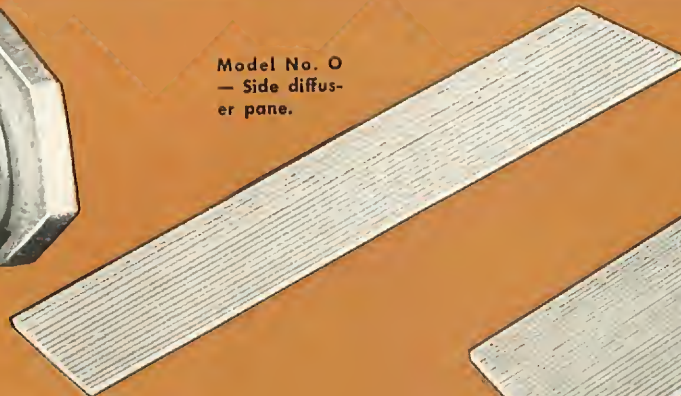
**STARTERS:** Standard, replaceable starters on end panels where they may be removed without disturbing tube or glass.

**APPROVED AND GUARANTEED:** All fluorescent U. R. C. units bear label of Underwriters Laboratory, are inspected and approved by U. R. C., and all in addition, bear the famous Electro unconditional guarantee of satisfaction.



Model No. M  
— Coupling  
nipple.

Model No. O  
— Side diffuser  
pane.

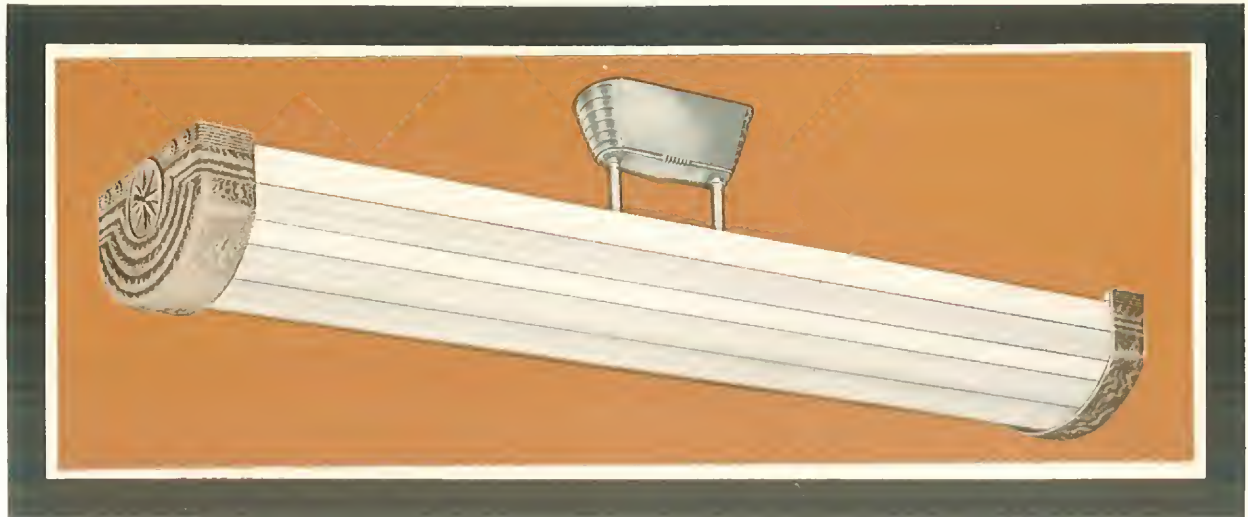


Model No. N  
— Bottom dif-  
fuser pane.



# Fluor-O-Master

## ROYAL



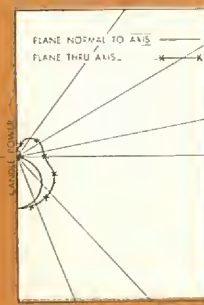
Here is the ideal light for offices, where high levels of illumination are needed throughout the entire working space. The Fluor-O-Master Royal provides light which is glacier-cool, shadowless, glareless, astonishingly powerful yet spectacularly economical in operation. Vastly steps up the illumination without increasing outlets or power load.

Translucent plastic end crowns eliminate the "dark spots" created by fixtures with metal crowns. In addition, these plastic pieces greatly enhance the beauty of this distinguished fluorescent unit.

The exceptional coolness of Fluor-O-Master illumination is of great value in air-conditioned offices, since it creates less heat-drain on a cooling system than incandescent lighting.

The clear light of properly installed Fluor-O-Master Royals eliminates the need of desk lamps. This means not only a saving in equipment, but also a saving in working space on the desk. Each unit is completely wired and ready for use. The reflecting surfaces are Electro's famous, exclusive white "Liquid Plastic", the most efficient reflection medium known.





MODEL 2248

## Fluor-O-Master ROYAL

MODEL No. 2248—Takes two T-12 forty-watt 48" fluorescent tubes. Total power consumption is far below that of an incandescent light providing the same foot candles. Body dimensions—49" long, 7" wide, 6" high. Height over-all, including canopy, 36". Shipping weight 21 pounds. Canopy and stem with grey "Liquid Plastic" coating over heavy gauge steel body. Beautiful translucent plastic ends. Made for 110-125 volt, A. C. 60 cycle. High power factor correction 90%.

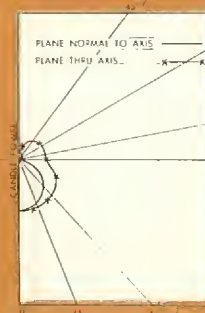
MODEL No. 2248F—Same as above, but flush mounted. Shipping weight 17 lbs.

MODEL No. 2224—Takes two T-12 twenty-watt 24" fluorescent tubes. Body dimensions 25" long, 7" wide, 6" high. Height over-all, including canopy, 36". Shipping weight 14 pounds. For 110-125 volt, A. C., 60 cycle. Over 90% high power factor correction.

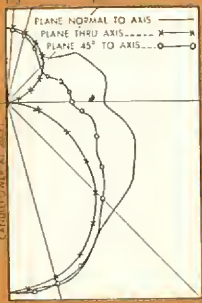
MODEL No. 2224F—Same as 2224 but flush mounted. Shipping weight 11 lbs.

FLUOR-O-MASTER 2248 & 2248F FOR TWO 48" FORTY WATT BULBS						
Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq. ft.	7' to 9'	light	52-62	47-56	35-41
			medium	47-55	41-48	31-37
			dark	42-50	40-47	29-34
7' x 7'	53 sq. ft.	7' to 9'	light	40-47	37-43	27-32
			medium	36-42	32-37	25-29
			dark	33-39	31-36	23-27
8' x 8'	67 sq. ft.	7' to 9'	light	29-34	26-31	19-23
			medium	25-30	23-27	17-20
			dark	24-28	22-26	16-19
9' x 9'	79 sq. ft.	8' to 11'	light	25-29	22-26	17-20
			medium	22-26	20-23	15-18
			dark	21-24	19-22	15-17
10' x 10'	103 sq. ft.	8' to 12'	light	19-22	16-19	12-14
			medium	16-19	14-17	11-13
			dark	14-17	13-16	10-11
11' x 11'	117 sq. ft.	10' to 13'	light	17-20	15-18	12-14
			medium	15-18	14-16	9-12
			dark	14-16	13-15	9-12

MODEL 2248F







**MODEL 2448**

## Fluor-O-Master ROYAL

FLUOR-O- MASTER 2448 & 2448F FOR FOUR 48" FORTY WATT BULBS						
Approx. Spacing	Approx. Illumination Area per Fixture	Mounting Height Above Floor	Room Condition	Average Foot Candles		
				Room Proportions		
				Good	Average	Fair
6' x 6'	38 sq. ft.	7' to 9'	light	105-124	95-112	73-86
			medium	93-109	87-103	65-76
			dark	87-103	83-98	63-74
7' x 7'	53 sq. ft.	7' to 9'	light	75-89	68-81	52-61
			medium	67-79	62-74	46-54
			dark	62-74	59-70	45-53
8' x 8'	67 sq. ft.	7' to 9'	light	60-70	54-69	42-49
			medium	53-62	49-58	37-44
			dark	49-58	47-56	36-42
9' x 9'	79 sq. ft.	8' to 11'	light	45-54	41-48	31-37
			medium	40-47	37-44	27-33
			dark	37-44	35-42	21-25
10' x 10'	103 sq. ft.	8' to 12'	light	38-45	35-41	27-32
			medium	34-40	32-38	24-28
			dark	32-38	30-36	23-27
11' x 11'	117 sq. ft.	10' to 13'	light	30-35	27-32	20-24
			medium	26-31	25-29	18-22
			dark	25-29	23-28	17-21

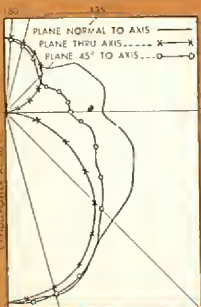
**MODEL No. 2448**—Takes four T-12 forty-watt 48" fluorescent tubes. Exceptionally economical power consumption. Strikingly beautiful design. Body dimensions—49" long, 7" wide, 6" high. Height over-all, including canopy, 36". Shipping weight 40 pounds. Cadmium plated canopy and stem with white "Liquid Plastic" coating over heavy gauge steel body. Beautiful translucent plastic ends. Made for 110-125 volt, A. C., 60 cycle. High power factor correction over 90%.

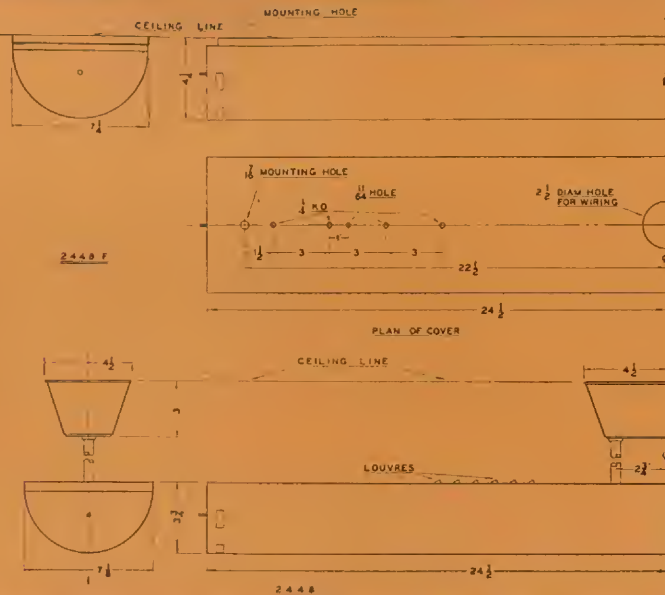
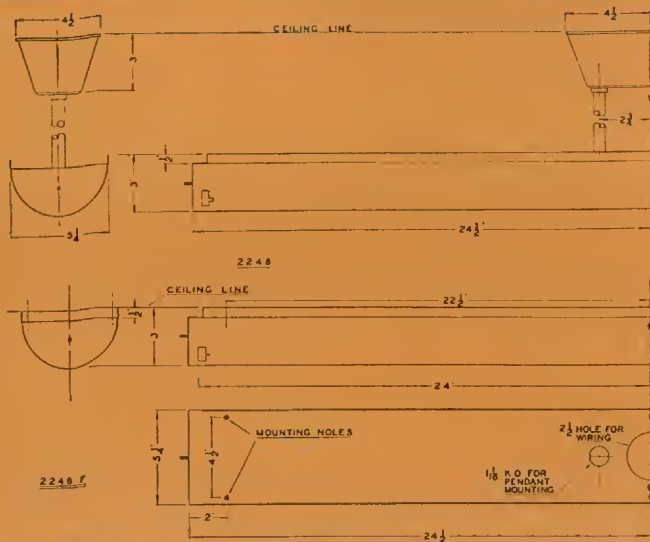
**MODEL No. 2448F**—Same as above, but flush mounted. Shipping weight 37 lbs.

**MODEL No. 2424**—Takes four T-12 twenty-watt 24" fluorescent tubes. Body dimensions 25" long, 7" wide, 6" high. Height over-all, including canopy, 36". Shipping weight 19 pounds. For 110-125 volt, A. C., 60 cycle.

**MODEL No. 2424F**—Same as 2424 but flush mounted. Shipping weight 16 lbs.

**MODEL 2448F**





All Fluor-O-Masters wired by members of I. B. E. W., affiliated with A. F. of L.

## Fluor-O-Master ROYAL SPECIFICATIONS

Available either for pendant mounting or for flush mounted application. All models are complete units, wired and ready for use, consisting of reflector, chassis, stems, canopy, end caps, and fully equipped with ballast, starter switches, and lamp holders.

**LAMPS:** Takes 40-watt T-12 forty-eight inch daylight or white fluorescent tubes.

**CHASSIS:** Constructed of heavy gauge metal, and completely equipped with all necessary wiring and accessories.

**END CROWNS:** Exquisitely designed end-crowns of translucent onyx-like plastic help eliminate blind spots.

**REFLECTOR:** Reflector is formed of a single sheet of heavy gauge steel, covered by Electro's exclusive white "Liquid Plastic", the most efficient reflection material ever devised. This surface is guaranteed for life against discoloration or crazing. It will not chip or crack.

**BALLASTS:** The finest Underwriters approved ballasts. Power factor of at least 90%.

**STARTERS:** Standard replaceable starters.

**SOCKETS:** Turn-lock lamp holders of durable plastic.

**APPROVED AND GUARANTEED:** All Fluor-O-Master Royals bear the label of the Underwriters Laboratory, are inspected and approved by E.T.L., and are, in addition, protected by the famous Electro unconditional guarantee of satisfaction.



To install flush mounted Royal fasten cover plate to ceiling with toggle bolt.

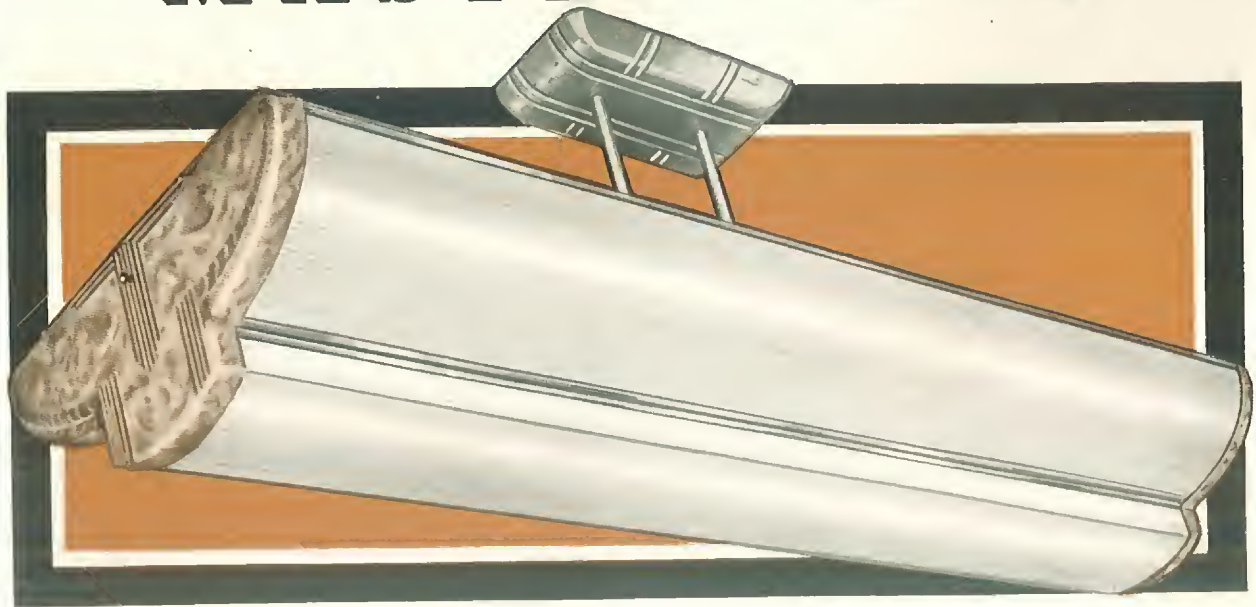


Body is then fastened to cover plate by screwing end cap on to body bolt.



# Fluor-O-Master

## MASTERPIECE



Light crystal clear and cool as the sparkling water of a mountain stream! Radically new, different, this strikingly beautiful Fluor-O-Master represents the greatest advance in fluorescent lighting. Exquisitely designed end-crowns of translucent plastic help eliminate blind spots.

Light is diffused by handsome plastic shields resembling frosted glass. They are unbreakable, and tho almost as flexible as cloth, cannot be dented, as material instantly springs back into shape. Shield provides extremely efficient light transmission, highest ever obtained. Like light from another world, the glareless, shadowless,

restful rays of this glorious creation will lend distinction to offices, auditoriums, lobbies. Ideal for factories and laboratories. Vastly increases illumination without increasing current consumption or power load—and without expensive added outlets.

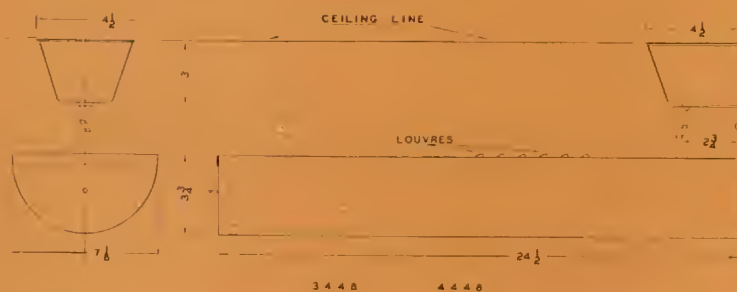
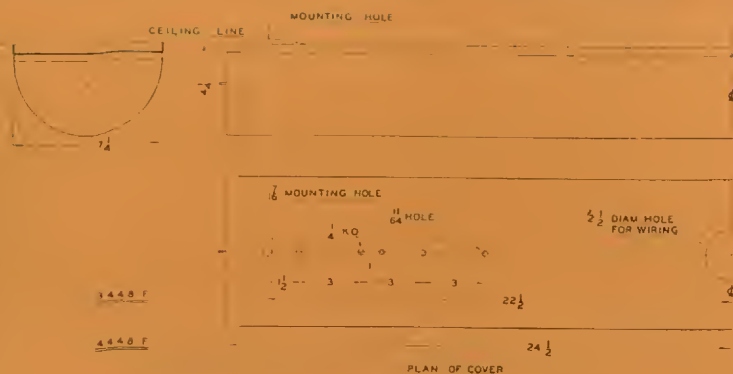
### MODEL NO. 3448

Shown above. Takes four T-12 forty-watt, 48" fluorescent lamps. Translucent plastic shields filter out glare, diffuse light without appreciable loss. Body dimension: 50" long, 15 $\frac{3}{4}$ " wide; 7" high. Height over-all: 37". Satin silver cadmium-plated canopy and stem. "Liquid Plastic" high reflection white body finish. Translucent Fluor-O-Master plastic ends. Available also in flush mounted model No. 3448F.

### MODEL NO. 4448

Illustrated below. Same as above except that instead of bottom plastic shield, this unit has louvre in bottom, scientifically designed to concentrate light downward. Available also in flush mounted model No. 4448F.





## Fluor-O-Master MASTERPIECE SPECIFICATIONS

Available either for pendant mounting or for flush mounted application. All models complete units, wired and ready for use, consisting of reflector, chassis, stems, canopy, end caps, and fully equipped with ballast, starter switches, and lamp holders.

**LAMPS:** Takes 40-watt T-12 forty-eight inch daylight or white fluorescent tubes.

**CHASSIS:** Constructed of heavy gauge metal, and completely equipped with all necessary wiring and accessories.

**END CROWNS:** Exquisitely designed end-crowns of translucent onyx-like plastic help eliminate blind spots.

All Fluor-O-Masters wired by members of I.B.E.W., affiliated with A.F. of L.

**DIFFUSER SHIELDS:** Translucent plastic shields filter out glare, diffuse light without appreciable loss. They are unbreakable, and tho almost as flexible as cloth, cannot be dented, as material instantly springs back into shape.

**REFLECTOR:** Reflector is formed of a single sheet of heavy gauge steel, covered by Electro's exclusive white "Liquid Plastic", the most efficient reflection material ever devised. This surface is guaranteed for life against discoloration or crazing. It will not chip or crack.

**BALLASTS:** The finest Underwriters approved ballasts. Power factor of at least 90%.

**STARTERS:** Standard replaceable starters.

**SOCKETS:** Turn-lock lamp holders of durable plastic.

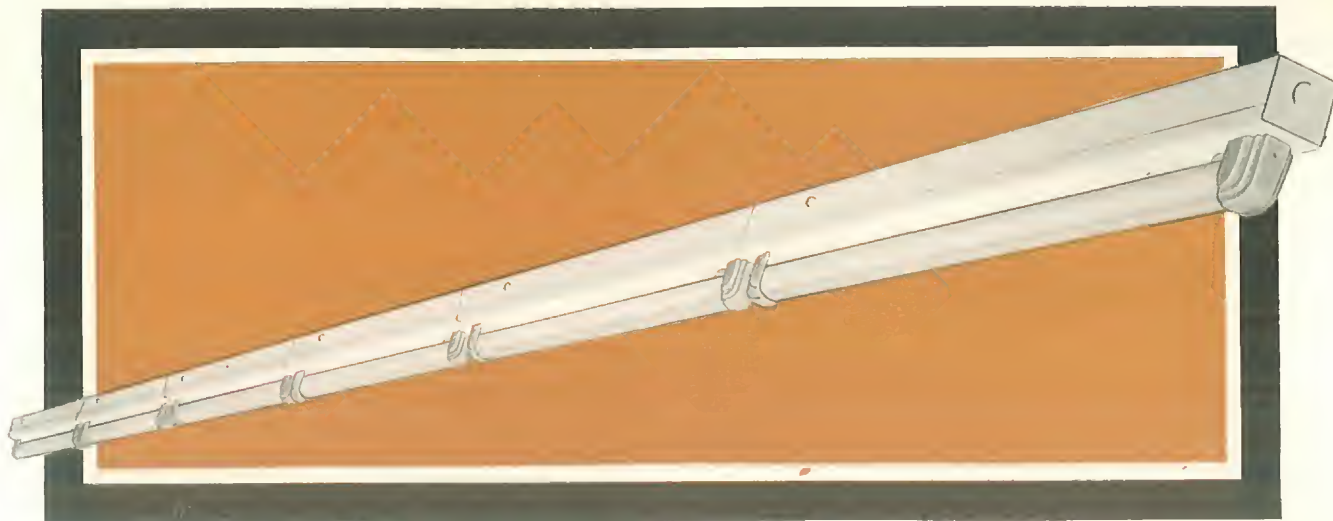
**APPROVED AND GUARANTEED:** All Fluor-O-Master Masterpieces bear the label of the Underwriters Laboratory, are inspected and approved by E. T. L., and are, in addition, protected by the famous Electro unconditional guarantee of satisfaction.





# Fluor-O-Master

## STRIP-LITE



**AN OUTSTANDING VALUE!** Highly adaptable for enormously varied applications. Five knockouts provided for connecting to standard electrical conduit or single or double pipe suspensions, and for bolting together in tandem or parallel mounting. Extra holes are drilled in back for lead wires and chain suspension loops.

Fluor-O-Master Strip-Lite is extremely compact, durable and economical in operation. Its cool light adds much to summer comfort, reduces air conditioning load. High power factor correction available. Easily cleaned, "Liquid Plastic" reflector surface helps diffuse illumination over a wide area. Exterior also finished in white "Liquid Plastic".

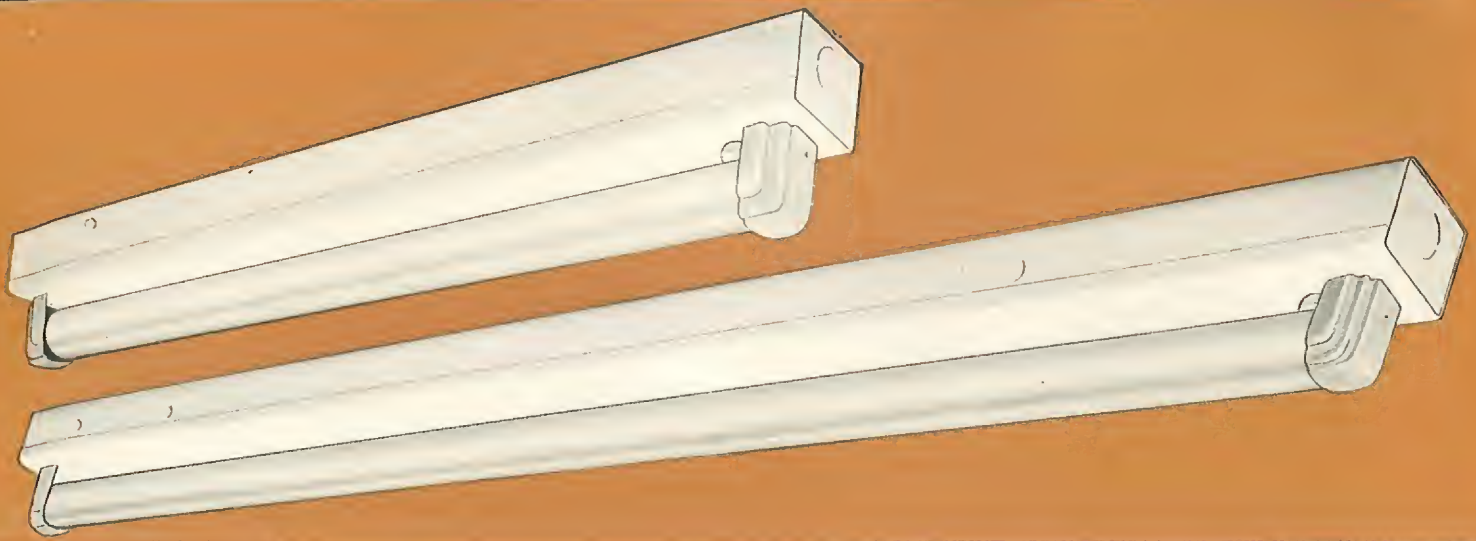
Available in tandem mounted or parallel mounted pairs, high power factor corrected.

The "Liquid Plastic" coating on the reflector surface is guaranteed against discoloration, crazing, and has higher resistance to chipping and cracking than any other material used for the purpose.

Streamlined masks of rich plastic cover the sockets and enhance the appearance of the fixture. Body is of heavy gauge, welded steel and is wired with a tested, fast-action starter. Ready to install. Built for a lifetime of service. You get more for your money in a Fluor-O-Master Strip-Lite







## Fluor-O-Master STRIP-LITE

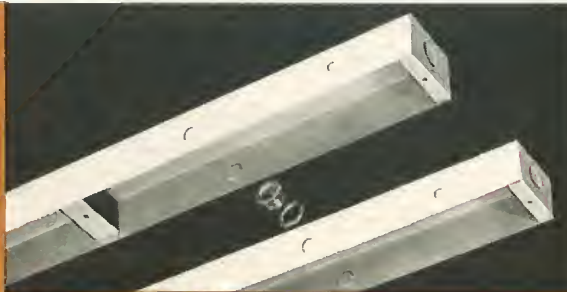
**MODEL S-24**—A highly satisfactory unit for use whenever a compact fixture is needed to fit in close quarters or to give widely diffused light.

Body of heavy gauge metal for lifetime use. Finished in white "Liquid Plastic". Knockouts for every type of suspension and wiring. Can be readily wired into a continuous line. 110-125 volts, 60 cycle, A. C. Low power factor. High power factor available at slight extra cost. Dimensions:  $2\frac{3}{4}$ " x  $1\frac{1}{8}$ " x 25". Takes one T-12 twenty watt fluorescent tube. Shipping weight, 6 pounds.

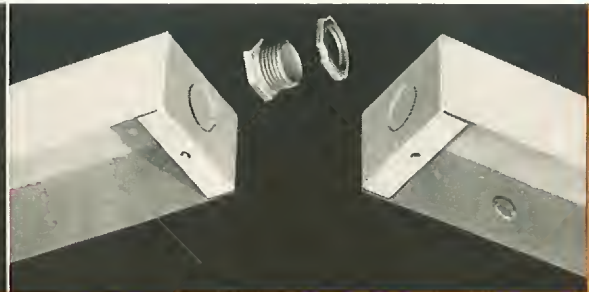
**MODEL S-48**—Same as Model S-24 except: Dimensions:  $2\frac{3}{4}$ " x  $1\frac{1}{8}$ " x 49". Takes one T-12 forty watt fluorescent tube. Shipping weight, 10 pounds.

**MODEL TS-48T**—Unit consists of two inter-connecting tandem channels on each of which is mounted a T-12 forty-watt fluorescent lamp. Intended for use in continuous lines where high foot candle power is necessary over a broad area. Frequently used also in banks of several parallel pairs for intense illumination in a particular location. All exterior surfaces covered with lifetime white "Liquid Plastic". Dimensions:  $5\frac{1}{8}$ " x  $1\frac{1}{8}$ " x 98". Shipping weight, 20 lbs. Equipped with ornamental plastic socket coverings. For 110-125 volt, 60 cycle, A. C. These Strip-Lites are power factor corrected.

*The most  
compact adjustable  
Strip-lite  
made*

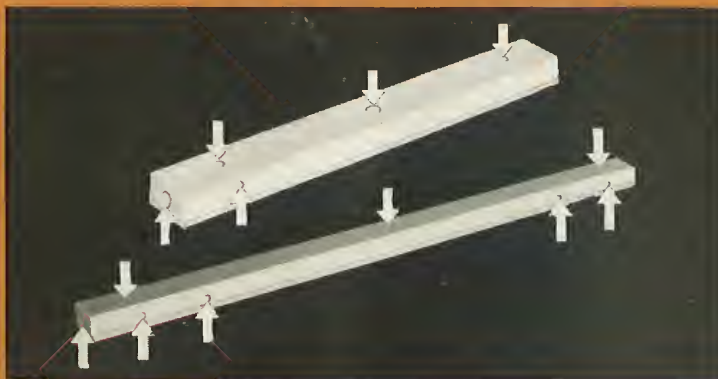


Knockouts are provided for parallel coupling with a chase nipple.



Completely enclosed continuous wireway of any length is easily provided by tandem coupling with a chase nipple in end knockouts.

*Engineered for  
simplicity  
efficiency  
economy*

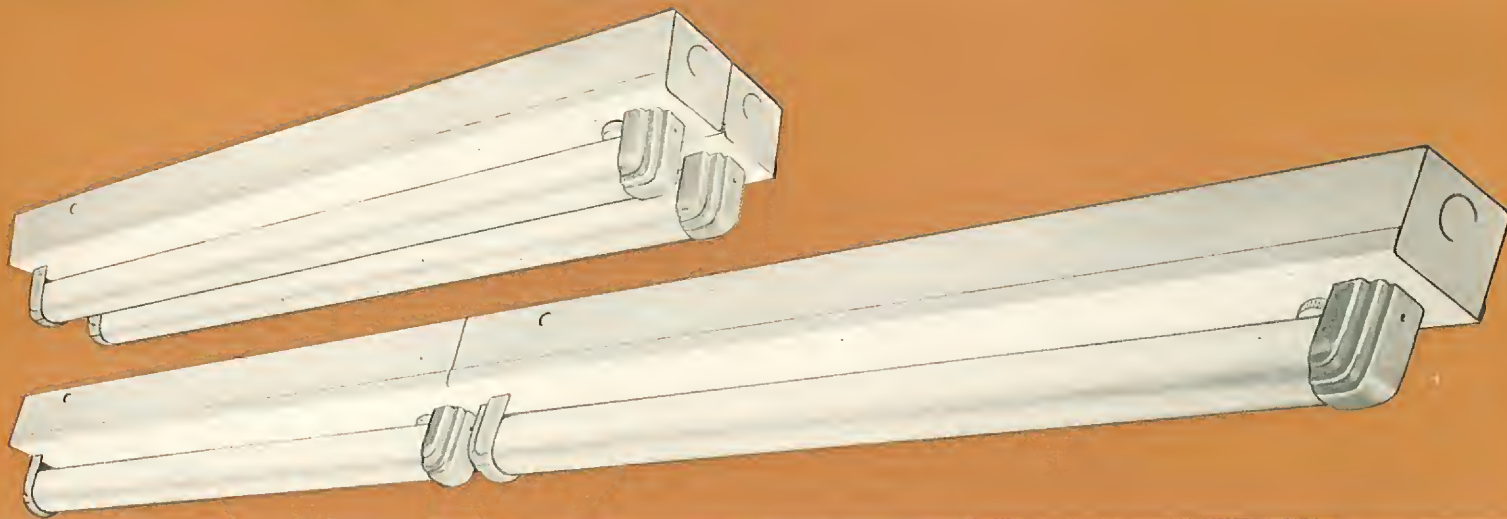


Knockouts provided for every type of wiring or suspension.



Lag-bolt or toggle may be used for flush mounting.





# Fluor-O-Master

## STRIP-LITE

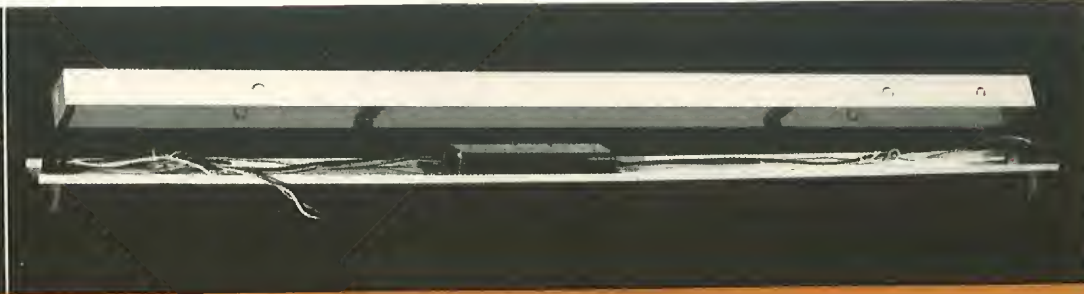
**MODEL TS-24P**—Unit consists of two inter-connecting parallel channels on each of which is mounted a T-12 twenty-watt fluorescent lamp. Intended for use in continuous lines, or to finish a row, where high foot candle power is necessary over a broad area, completely diffused. Frequently used also in banks of several parallel or tandem pairs for intense illumination in a particular location. All ex-

terior surfaces covered with lifetime white "Liquid Plastic". Dimension: 5½" x 1⅞" x 25". Shipping weight, 12 lbs. Equipped with ornamental plastic socket coverings. For 110-125 volt, 60 cycle, A. C. High power factor corrected available at slight extra cost.

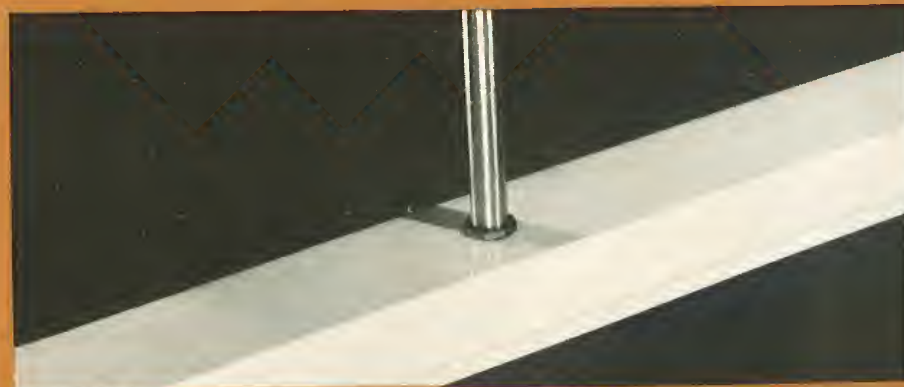
**MODEL TS-48P**—Cuts down cost of materials and labor in wiring a continuous row. **High power factor corrected.** Unit consists of two inter-connecting parallel channels on each of which is mounted a T-12 forty-watt fluorescent lamp. Dimensions: 2¾" x 1⅞" x 49". Shipping weight, 20 lbs. For 110-125 volt, 60 cycle, A. C. White "Liquid Plastic" finish on all surfaces. Completely wired and ready for use.



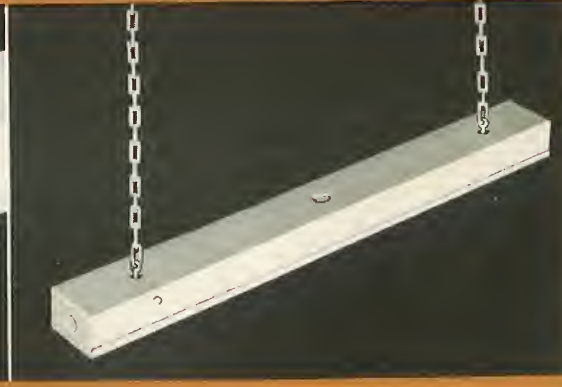
Two screws drop channel-plate for complete access to wiring.



All wiring is attached to channel plate. Thus wiring may be easily removed for servicing without dis-mounting body.

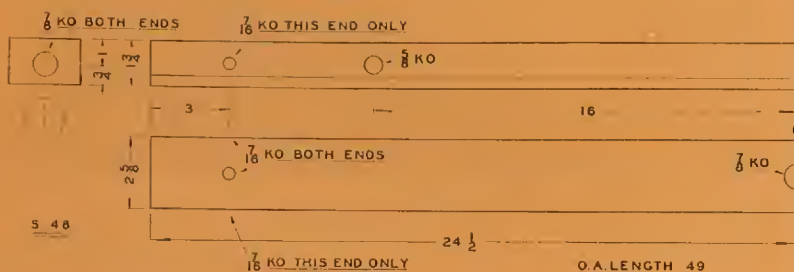
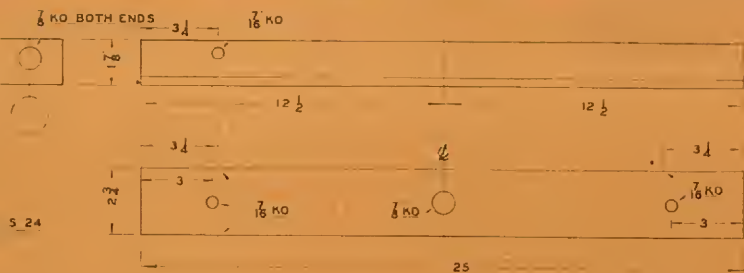


Frequently used as inexpensive overhead fixture suspended by rod or stem.



For chain suspension insert eyebolts in knockouts and attach chain.





## Fluor-O-Master

(REG. U. S. PAT. OFFICE)

# STRIP-LITE

# SPECIFICATIONS

There are two basic Fluor-O-Master Strip-Lites—25", twenty-watt fixture and a 49" forty-watt fixture. Each of these sizes is available in individual units or in either tandem mounted or in parallel mounted pairs. All pairs are power factor corrected.

Dimensions of 20-watt channel are 2 3/4" x 1 7/8" x 25". Dimensions of 40-watt channel are 2 3/4" x 1 7/8" x 50". All units, whether twin or single models are completely wired and ready for use, complete with ballasts, starter switches, and lamp holders.

**LAMPS:** Models S-24 and TS-24P each take T-12 twenty-watt fluorescent tubes, in either daylight or white.

Models S-48, TS-48P and TS-48T, each take T-12 forty-watt fluorescent tubes, in either daylight or white.

**CHANNEL:** All channels are coated completely with lifetime white "Liquid Plastic". Heavy gauge metal used throughout. All wiring completely contained within the channel. Knockouts are provided at

All Fluor-O-Masters wired by members of I. B. E. W., affiliated with A. F. of L.

either end of the channel for mounting in continuous row. There are two knockouts on each side of each channel for admitting wire to fixtures mounted flush with wall, and for use in parallel mounting. Additional knockouts are provided in top for suspension stems, eye hooks to hold chain hangers, and for wiring.

**REFLECTOR:** Reflector surfaces are coated completely with lifetime "Liquid Plastic", the most brilliant and durable coating available for the purpose. Average minimum reflection factor for Fluor-O-Master Strip-Lite is 80%. Wiring in channel may be instantly exposed for servicing by releasing screws in reflector so as to lower reflector plate. All wiring, ballasts, lamp holders are mounted to the inside of reflector plate. This makes it possible to remove entire wiring for repair without taking down the fixture.

**BALLAST:** The finest Underwriters approved ballast. Power factor of at least 90% where specified.

**STARTERS:** Standard replaceable starters.

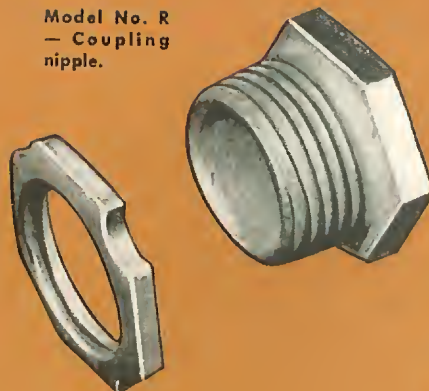
**SOCKETS:** Turn-lock lamp holders of durable plastic, equipped with detachable streamlined plastic socket masks, which greatly enhance the appearance of the Fluor-O-Master Strip-Lite, when used as an individual fixture.

**APPROVED AND GUARANTEED:** All Fluor-O-Master Strip-Lites bear the label of the Underwriters Laboratory, and are, in addition, protected by the famous Electro unconditional guarantee of satisfaction.

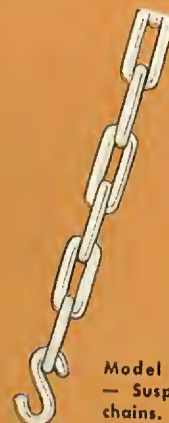


Model No. 100  
— Translucent  
plastic socket  
mask.

Model No. R  
— Coupling  
nipple.



Model No. K  
— Suspension  
pipe available  
in any length.



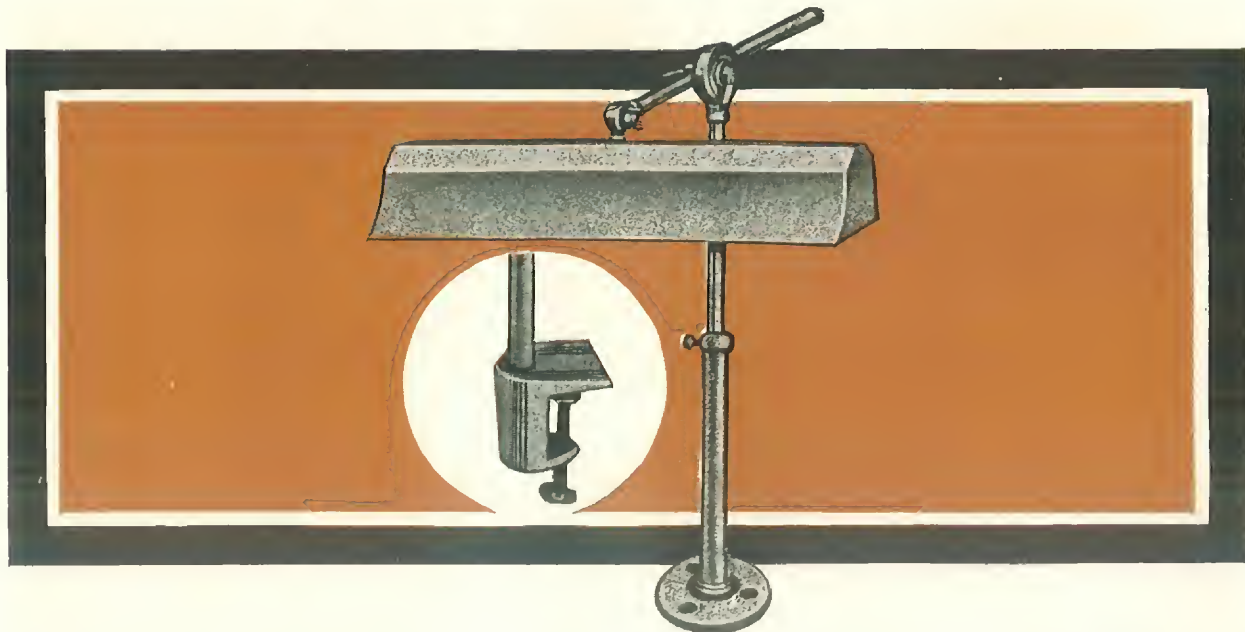
Model No. F  
— Suspension  
chains.



# Fluor-O-Master

(REG. U. S. PAT. OFFICE)

## BENCH LAMP



This husky, versatile bench lamp provides an ideally cool, glareless, shadowless light for precision work requiring maximum visibility. Completely adjustable in all directions—throws light just where you want it. This powerful, restful Fluor-O-Master starts earning its way the moment it is installed, prevents accidents and delays caused by eye-strain and fatigue on precision jobs. Built to last as long as your factory. This

heavy-duty unit has brown wrinkle finish. Takes one T-8 fifteen watt fluorescent tube. Has 7 foot Underwriter's approved cord and plug. Shade is 18" long. Height can be adjusted from 14" to 26". A sliding arm will extend shade 16" forward. Shipping weight 8 lbs.

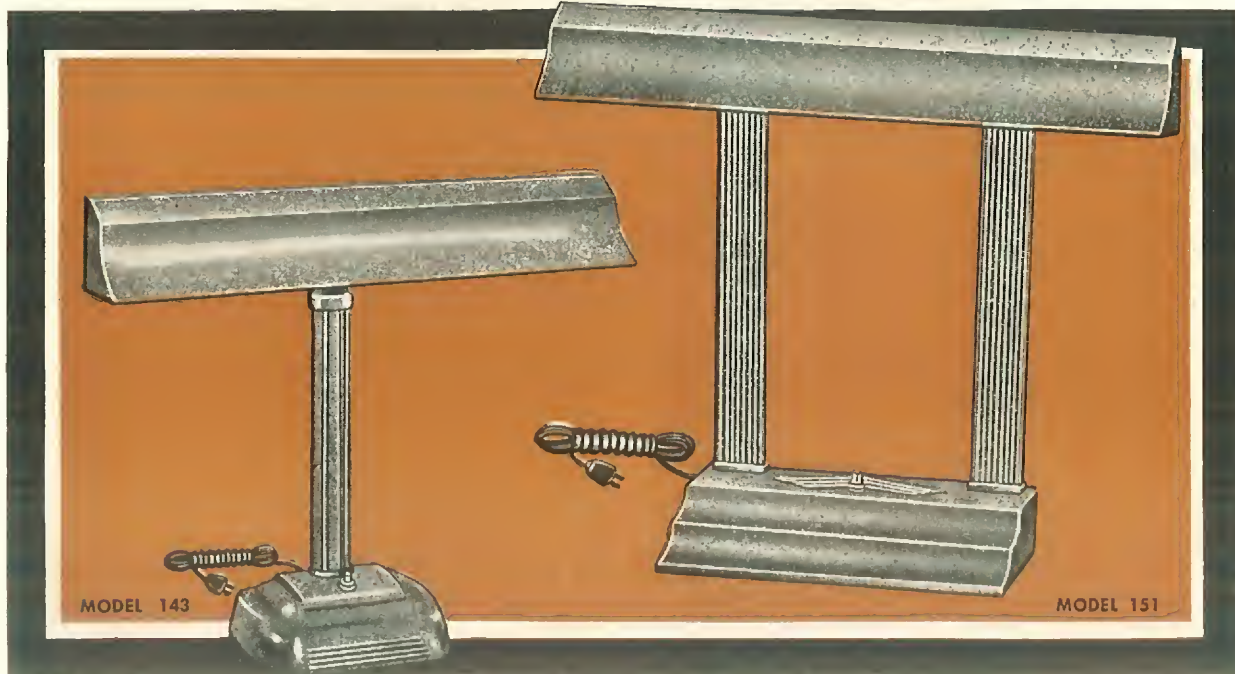
Model No. 160 has clamp and Model No. 161 has mounting flange.





# Fluor-O-Master

## DESK LAMP



Perhaps the most widely used desk lamp in defense industry, the Fluor-O-Master is attractive in appearance—but simple and functional to meet today's streamlined needs. This is the ideal illumination for those who must spend long hours concentrating on close work at a desk. Eyes do not become tired from the light, for it is practically glareless and shadowless. It is actually better than daylight, since it has the same desirable visual qualities without the glare. Far cooler than ordinary incandescent light, the Fluor-O-Master is a

boon to the desk-worker in hot weather. Built to stand the test of time.

**MODEL 151**—Lighting luxury reaches a climax in this distinctive desk lamp. Bathes the entire surface of your desk with powerful, yet completely glareless, cool light. Quality and craftsmanship is typified by the Chairman's simple, handsome lines and attractive brown wrinkle finish. Takes 15 watt T-8 lamp. Height overall 15½". Shade 18" long. Underwriter's approved electrical parts. Chip-proof white Liquid Plastic reflector surface. For 110-125 volt, 60 cycle A. C. Shipping weight 12 lbs.

**MODEL 143**—Finished in rich brown wrinkle, this lamp will improve the efficiency of any office. Its COOL light covers the surface of your desk uniformly and completely as a tablecloth. No. reflection, no glare. A treat for the eyes . . . in every way! Height overall 14½". Shade 18" long. Chip-proof white Liquid Plastic reflector surface. Takes 15 watt T-8 lamp. For 110-125 volt, 60 cycle A. C. Shipping weight 10 lbs.





# Fluor-O-Master

TRADE MARK REG.

## TRIPLE GUARANTEE



### Fluor-O-Master GUARANTEE

This certified Fluor-O-Master when properly installed and equipped with lamps meeting U. S. Government purchase specifications is guaranteed to be free from defects in material, workmanship or assembly for a period of ninety (90) days from date of delivery to purchaser. Should any such defects appear within that time and under normal conditions of use, the undersigned company will furnish new material or parts in exchange for any found defective and will correct any faulty workmanship.

**ELECTRO MANUFACTURING CO., CHICAGO**

**1**

**2**



**3**

**UNDERWRITERS LABORATORY APPROVED**

*Fluor-O-Master*  
TRADE MARK REG.  
**BOMBER LINE**

★ ★ ★ **FLUORESCENT LIGHTING** ★ ★ ★  
**FOR WAR INDUSTRIES**

